TV-VCR Combination

Service
Service
Service

14PV360/01/07/39
14PV365/01/07/39/58

Service Manual

Contents

Chapter

Sec. 1: Adjustment Procedure
Schematic Diagrams and CBA's
Exploded Views
Mechanical and Electrical Parts Lists

Sec. 2: Standard Maintenance
Mechanism Alignment Procedures
Disassembly / Assembly of Mechanism
Deck Exploded Views

Survey of versions:

/01	PAL-BG, EURO
/07	PAL I, Ireland
/39	PAL/SECAM-BG+PAL/SECAM-L/L',FRANCE
/58	PAL-BG/DK+SECAM-BG/DK,EAST-EURO

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

Published by BK 2002 Video Service Department Printed in the Netherlands

© Copyright reserved Subject to modification

GB 3103 785 22040

MAIN SECTION

TV-VCR COMBINATION

Sec. 1: Main Section

- **Adjustment Procedures**
- **Schematic Diagrams and CBA's**
- **Exploded Views**
- **Mechanical and Electrical Parts List**

TABLE OF CONTENTS

IMPORTANT SAFETY PRECAUTIONS 1-1-1
STANDARD NOTES FOR SERVICING 1-2-1
PREPARATION FOR SERVICING 1-3-1
OPERATING CONTROLS AND FUNCTIONS 1-4-1
CABINET DISASSEMBLY INSTRUCTIONS 1-5-1
ELECTRICAL ADJUSTMENT INSTRUCTIONS 1-6-1
BLOCK DIAGRAMS 1-7-1
SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS 1-8-1
WAVEFORMS 1-9-1
WIRING DIAGRAM 1-10-1
SYSTEM CONTROL TIMING CHARTS 1-11-1
IC PIN FUNCTION DESCRIPTIONS 1-12-1
LEAD IDENTIFICATIONS 1-13-1
ELECTRICAL PARTS LIST 1-14-1
EXPLODED VIEWS 1-15-1
SET MECHANICAL PARTS LIST 1-16-1

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Safety Precautions for TV Circuit

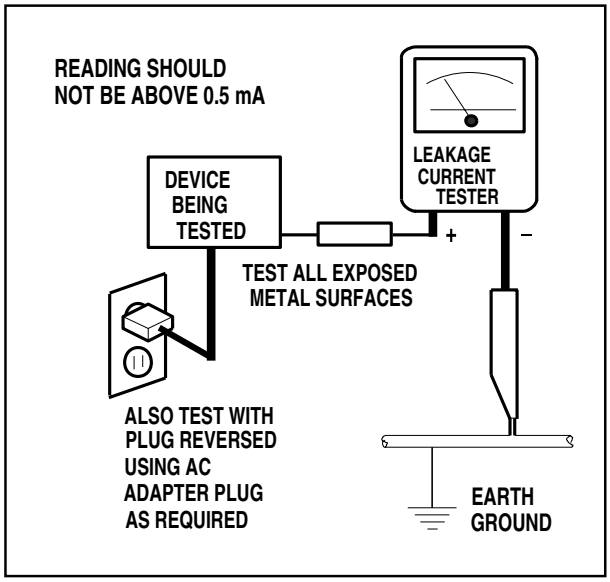
1. **Before returning an instrument to the customer,** always make a safety check of the entire instrument, including, but not limited to, the following items:

a. Be sure that no built-in protective devices are defective and have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**

b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the picture tube and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.

c. Antenna Cold Check - With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm, an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the instrument AC switch in the off position.

d. Leakage Current Hot Check - With the instrument completely reassembled, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the instrument power cord plug in the outlet and repeat the test.



ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.

e. X-Radiation and High Voltage Limits - Because the picture tube is the primary potential source of X-radiation in solid-state TV receivers, it is specially constructed to prohibit X-radiation emissions. For continued X-radiation protection, the replacement picture tube must be the same type as the original. Also, because the picture tube shields and mounting hardware perform an X-radiation protection function, they must be correctly in place. High voltage must be measured each time servic-

ing is performed that involves B+, horizontal deflection or high voltage. Correct operation of the X-radiation protection circuits also must be reconfirmed each time they are serviced. (X-radiation protection circuits also may be called "horizontal disable" or "hold down.") Read and apply the high voltage limits and, if the chassis is so equipped, the X-radiation protection circuit specifications given on instrument labels and in the Product Safety & X-Radiation Warning note on the service data chassis schematic. High voltage is maintained within specified limits by close tolerance safety-related components/adjustments in the high-voltage circuit. If high voltage exceeds specified limits, check each component specified on the chassis schematic and take corrective action.

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the picture tube.

3. Design Alteration Warning - Do not alter or add to the mechanical or electrical design of this TV receiver. Design alterations and additions, including, but not limited to circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.

4. Picture Tube Implosion Protection Warning - The picture tube in this receiver employs integral implosion protection. For continued implosion protection, replace the picture tube only with one of the same type number. Do not remove, install, or otherwise handle the picture tube in any manner without first putting on shatterproof goggles equipped with side shields. People not so equipped must be kept safely away while picture tubes are handled. Keep the picture tube away from your body. Do not handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; because of potential hazard, do not try to remove such "permanently attached" yokes from the picture tube.

5. Hot Chassis Warning -

a. Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord and maybe safety-serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC power source. To confirm that the AC power plug is inserted correctly, with an AC voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0V is obtained, remove and reinsert the AC power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.

b. Some TV receiver chassis normally have 85V AC(RMS) between chassis and earth ground regardless of the AC plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection.

c. Some TV receiver chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulation material that must not be defeated or altered.

6. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: a. near sharp edges, b. near thermally hot parts-be sure that leads and components do not touch thermally hot parts, c. the AC supply, d. high voltage, and e. antenna wiring. Always inspect in all areas for pinched, out of place, or frayed wiring. Check AC power cord for damage.

7. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.

8. Product Safety Notice - Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc.. Parts that have special safety characteristics are identified by a (⚠) on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The Product's Safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are strictly inspected to confirm with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Precautions during Servicing

A. Parts identified by the (⚠) symbol are critical for safety.

Replace only with part number specified.

B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.

Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.

C. Use specified internal wiring. Note especially:

1) Wires covered with PVC tubing
2) Double insulated wires
3) High voltage leads

D. Use specified insulating materials for hazardous live parts. Note especially:

1) Insulation Tape
2) PVC tubing
3) Spacers
4) Insulators for transistors.

E. When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.

F. Observe that the wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

G. Check that replaced wires do not contact sharp edged or pointed parts.

H. When a power cord has been replaced, check that 5~6 kg of force in any direction will not loosen it.

I. Also check areas surrounding repaired locations.

J. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

K. Crimp type wire connector

When replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, in order to prevent shock hazards, perform carefully and precisely the following steps.

Replacement procedure

1) Remove the old connector by cutting the wires at a point close to the connector.

   Important: Do not re-use a connector (discard it).

2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.
3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.
4) Use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

L. When connecting or disconnecting the VCR connectors, first, disconnect the AC plug from AC supply socket.

Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

T**Table 1 : Ratings for selected area**

AC Line Voltage	Clearance Distance (d) (d')
220 to 240 V	≥ 3mm(d) ≥ 6 mm(d')

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

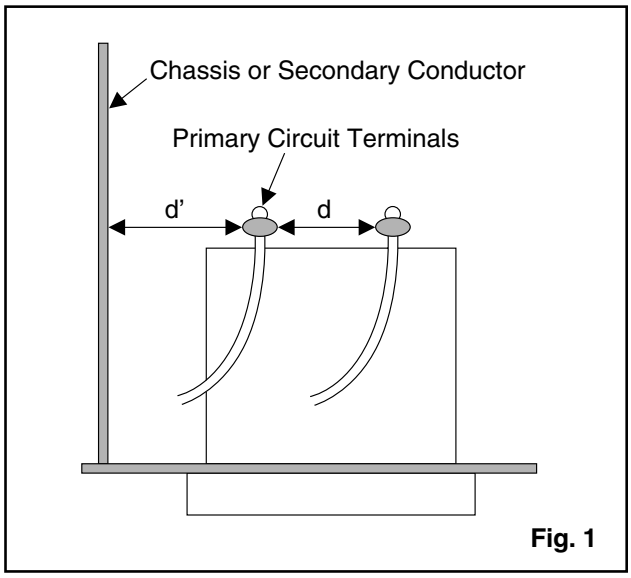


Fig. 1

2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method : (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig. 2 and following table.

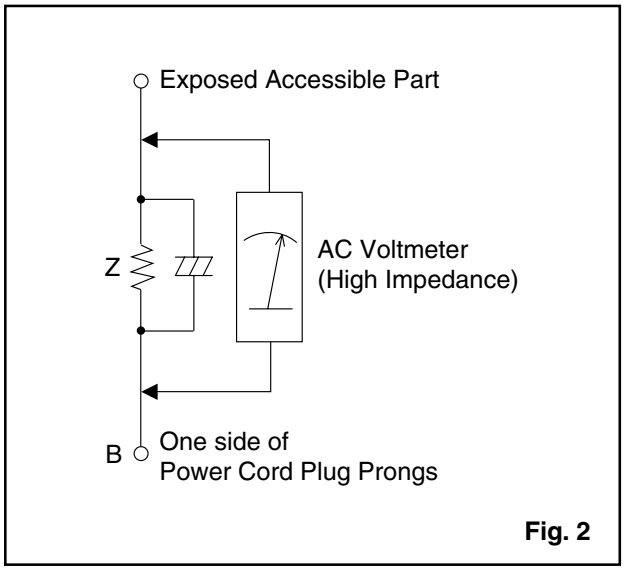


Fig. 2

T**Table 2: Leakage current ratings for selected areas**

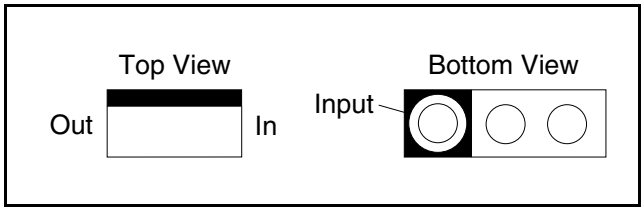
AC Line Voltage	Load Z	Leakage Current (i)	One side of power cord plug prongs (B) to:
220 to 240 V	2kΩ RES. Connected in parallel	i≤0.7mA AC Peak i≤2mA DC	RF or Antenna terminals
	50kΩ RES. Connected in parallel	i≤0.7mA AC Peak i≤2mA DC	A/V Input, Output

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

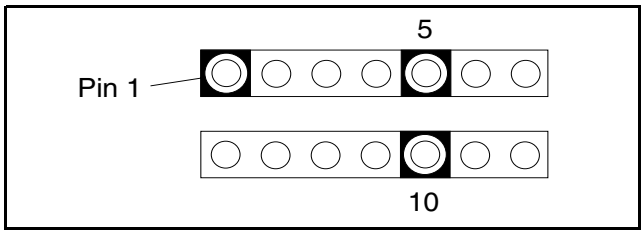
STANDARD NOTES FOR SERVICING

Circuit Board Indications

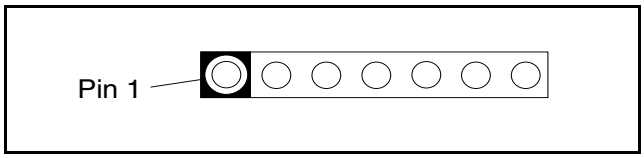
1. The output pin of the 3 pin Regulator ICs is indicated as shown:



2. For other ICs, pin 1 and every 5th pin is indicated as shown:

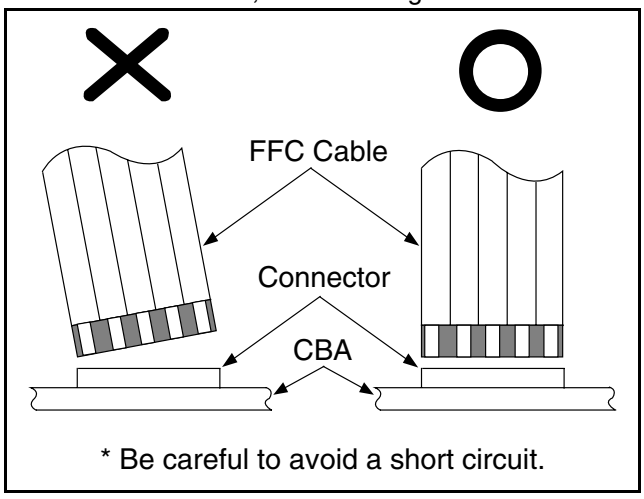


3. The 1st pin of every pin connector are indicated as shown:



Instructions for Connectors

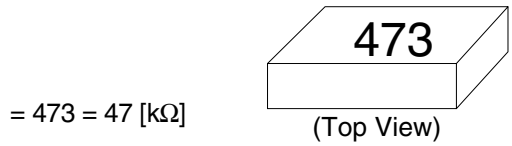
1. When you connect or disconnect FFC cable (connector), be sure to disconnect the AC cord.
2. FFC cable (connector) should be inserted parallel into the connector, not at an angle.



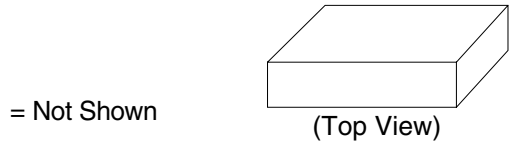
[CBA= Circuit Board Assembly]

How to Read the Values of the Rectangular Type Chip Components

Example:
(a) Resistor



(b) Capacitor



Caution:
Once chip parts (Resistors, Capacitors, Transistors, etc.) are removed, they must not be reused. Always use a new part.

Replacement Procedures for Leadless (Chip) Components

The Following Procedures are Recommended for the Replacement of the Leadless Components Used in this Unit.

1. Preparation for replacement

a. Soldering Iron
Use a pencil-type soldering iron (less than 30 watts).

b. Solder
Eutectic solder (Tin 63%, Lead 37%) is recommended.

c. Soldering time
Do not apply heat for more than 4 seconds.

d. Preheating
Leadless capacitor must be preheated before installation. (130°C~150°C, for about two minutes.)

Notes:

a. Leadless components must not be reused after removal.

b. Excessive mechanical stress and rubbing for the component electrode must be avoided.

2. Removing the leadless component

Grasp the leadless component body with tweezers and alternately apply heat to both electrodes. When the solder on both electrodes has melted, remove leadless component with a twisting motion.

Notes:

a. Do not attempt to lift the component off the board until the component is completely disconnected from the board by the twisting action.

b. Take care not to break the copper foil on the printed board

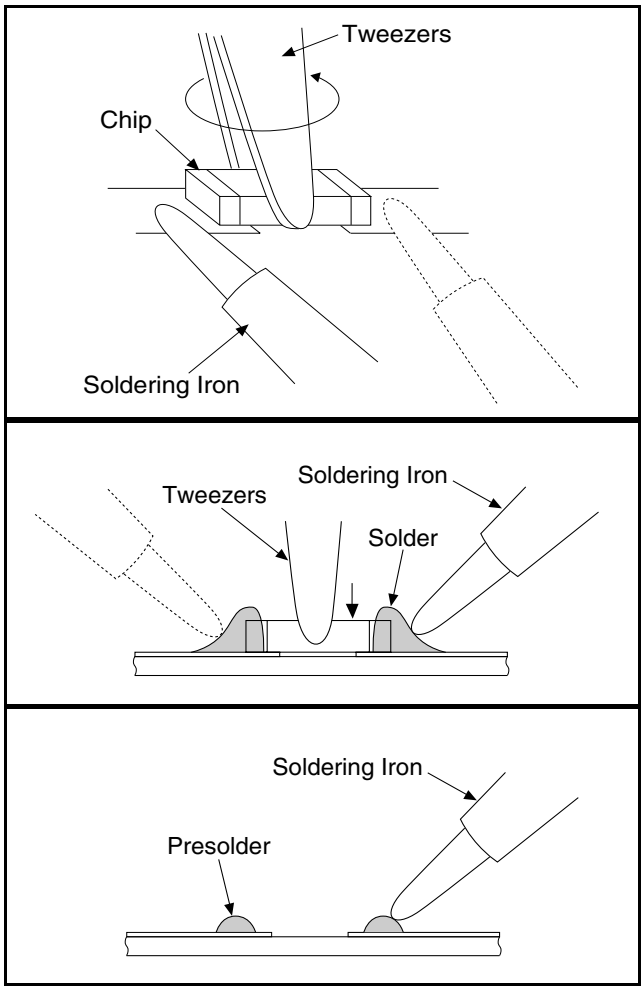
3. Installing the leadless component

a. Presolder the contact points of the circuit board.

b. Press the part downward with tweezers and solder both electrodes as shown below.

Note:

Do not glue the replacement leadless component to the circuit board.



How to Remove / Install Flat Pack IC

Caution:

1. Do not apply the hot air to the chip parts around the Flat Pack-IC for over 6 seconds as damage may occur to the chip parts. Put Masking Tape around the Flat Pack-IC to protect other parts from damage. (Fig. S-1-2)

2. The Flat Pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or solder lands under the IC when removing it.

1. Removal

With Hot - Air Flat Pack - IC Desoldering Machine:

a. Prepare the Hot - Air Flat Pack - IC Desoldering Machine, then apply hot air to Flat Pack - IC (about 5~6 seconds). (Fig. S-1-1)

b. Remove the Flat Pack- IC with tweezers while applying the hot air.

With Soldering Iron:

a. Using desoldering braid, remove the solder from all pins of the Flat Pack - IC. When you use solder flux which is applied to all pins of the Flat Pack - IC, you can remove it easily. (Fig. S-1-3)

b. Lift each lead of the Flat Pack - IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air Desoldering Machine. (Fig. S-1-4)

With Iron Wire:

a. Using desoldering braid, remove the solder from all pins of the Flat Pack - IC. When you use solder flux which is applied to all pins of the Flat Pack - IC, you can remove it easily. (Fig. S-1-3)

b. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.

c. Pull up on the wire as the solder melts so as to lift the IC leads from the CBA contact pads, while heating the pins using a fine tip soldering iron or hot air blower.

Note:

When using a soldering iron, care must be taken to ensure that the Flat Pack - IC is not being held by glue, or when it is removed from the CBA, it may be damaged if force is used.

2. Installation

a. Using desoldering braid, remove the solder from the foil of each pin of the Flat Pack - IC on the CBA, so you can install a replacement Flat Pack - IC more easily.

b. The "●" mark on the Flat Pack - IC indicates pin 1 (See Fig. S-1-6). Make sure this mark matches the 1 on the CBA when positioning for installation. Then pre - solder the four corners of the Flat Pack-IC (See Fig. S-1-7).

c. Solder all pins of the Flat Pack - IC. Make sure that none of the pins have solder bridges.

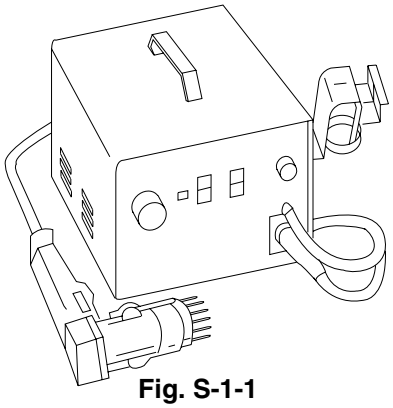


Fig. S-1-1

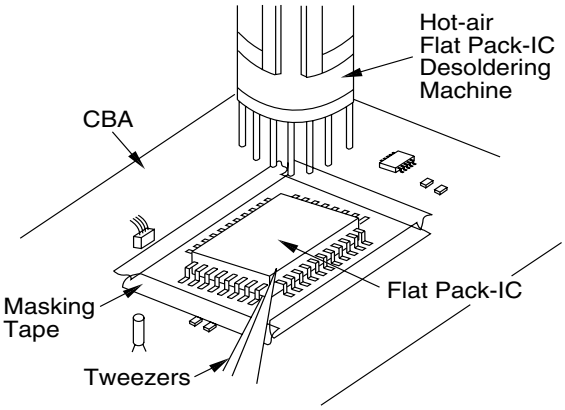


Fig. S-1-2

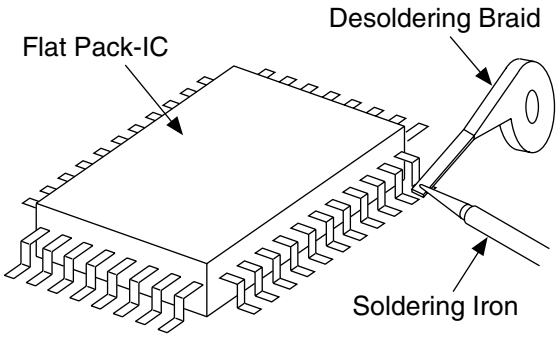


Fig. S-1-3

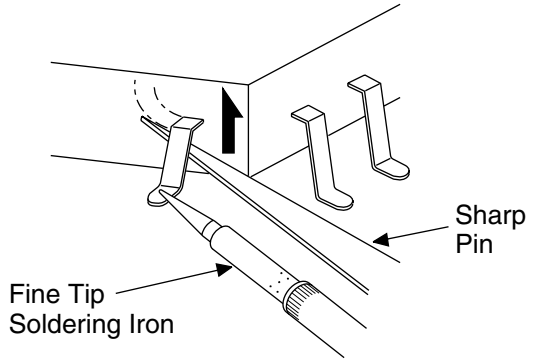


Fig. S-1-4

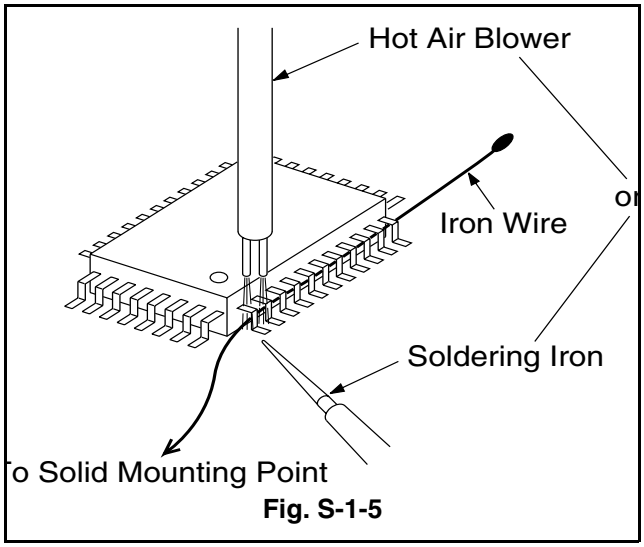


Fig. S-1-5

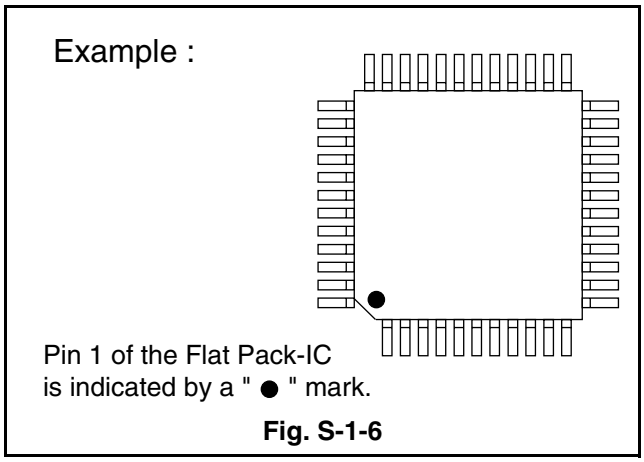


Fig. S-1-6

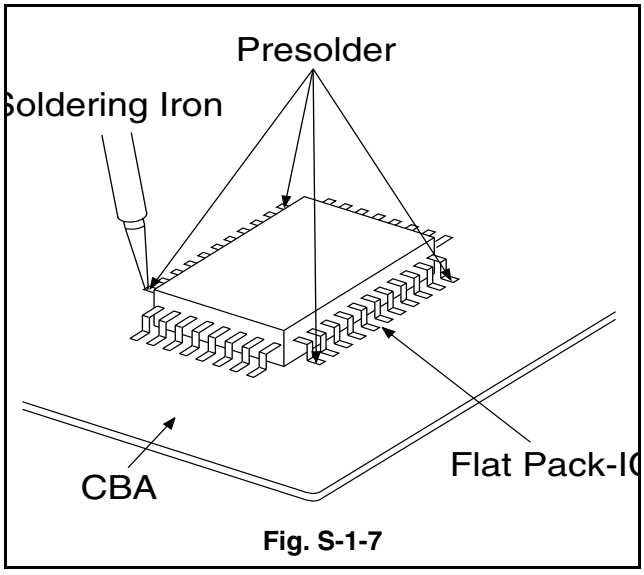


Fig. S-1-7

Instructions for Handling Semiconductors

Electrostatic breakdown of the semiconductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

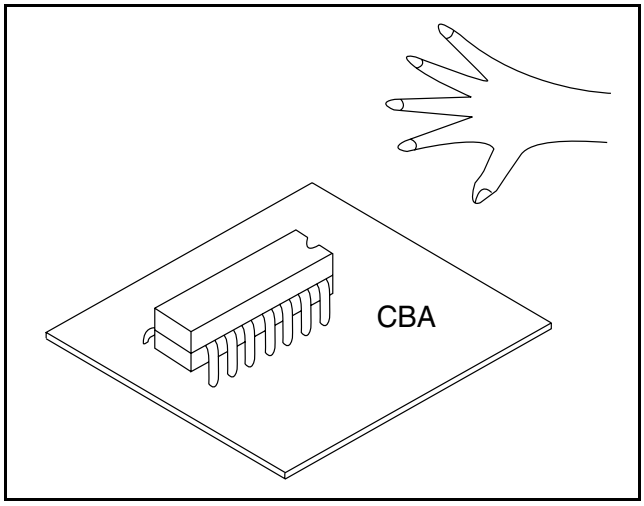
Ground for Human Body

Be sure to wear a grounding band (1MΩ) that is properly grounded to remove any static electricity that may be charged on the body.

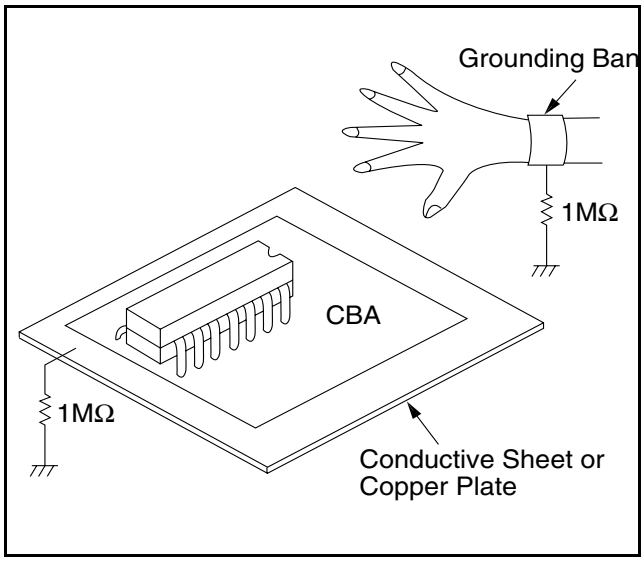
Ground for Work Bench

Be sure to place a conductive sheet or copper plate with proper grounding (1MΩ) on the work bench or other surface, where the semiconductors are to be placed. Because the static electricity charge on the clothing will not escape through the body grounding band, be careful to avoid contacting semiconductors to clothing.

Incorrect



Correct



PREPARATION FOR SERVICING

How to Enter the Service Mode

Caution: 1

1. Optical sensors system are used for Tape Start and End Sensor on this equipment. Read this page carefully and prepare as described on this page before starting to service; otherwise, the unit may operate unexpectedly.

Preparing: 1

1. Cover Q202 (START SENSOR) and Q201 (END SENSOR) with Insulation Tape or enter the service mode to activate Sensor Inhibition automatically.

Note: Avoid playing, rewinding or fast forwarding the tape to its beginning or end, because both Tape End Sensors are not active.

How to Enter the Service Mode

1. Turn the power on. (Use main power on the TV unit.)
2. Press [STANDBY/ON], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds. When entering the service mode, “F” will display at corners of the screen.
3. During the service mode, electrical adjustment mode can be selected by remote control key.

   Details are as follows.

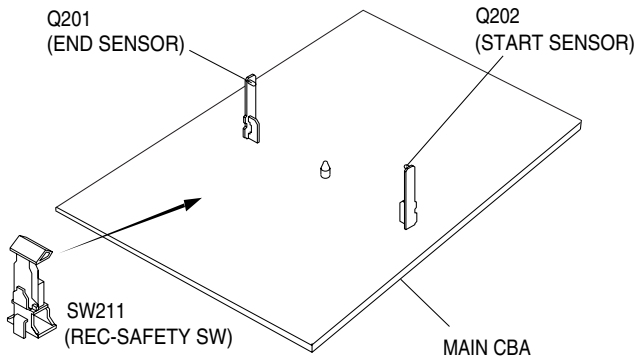
Key	Adjustment Mode
MENU	Picture adjustment mode: Press the MENU button to change from BRT (Bright), *CNT (Contrast), *COL (Color), *TNT(Tint) and SHP. Press P+/P- key to display Initial Value. *Marked items are not necessary to adjust normally.
◿ ▼	SECAM Black Level adjustment mode: See adjustment instructions page 1-6-3. Cut-Off adjustment mode: See adjustment instructions page 1-6-4. White Balance adjustment mode: See adjustment instructions page 1-6-5.
0	C-Trap adjustment mode: See adjustment instructions page 1-6-2.
1	DSPC adjustment mode: See adjustment instructions page 1-6-3.
2	H adjustment mode: See adjustment instructions page 1-6-2.
3	No need to use.
4	Auto record mode: Perform recording (15 Sec.)-->Stop-->Rewind (Zero return) automatically.
5	Head switching point adjustment mode: See adjustment instructions page 1-6-6.
6	No need to use.
7	Purity check mode: Shows Red, Green, Blue or White cyclically on the screen each time the [7] key is pressed.
8	H. Shift adjustment mode: See adjustment instructions page 1-6-4.
9	V.size/V. shift adjustment: See adjustment instructions page 1-6-4.

Caution: 2

1. The deck mechanism assembly is mounted on the Main CBA directly, and SW211 (REC-SAFETY SW) is mounted on the Main CBA. When deck mechanism assembly is removed from the Main CBA due to servicing, this switch can not be operated automatically.

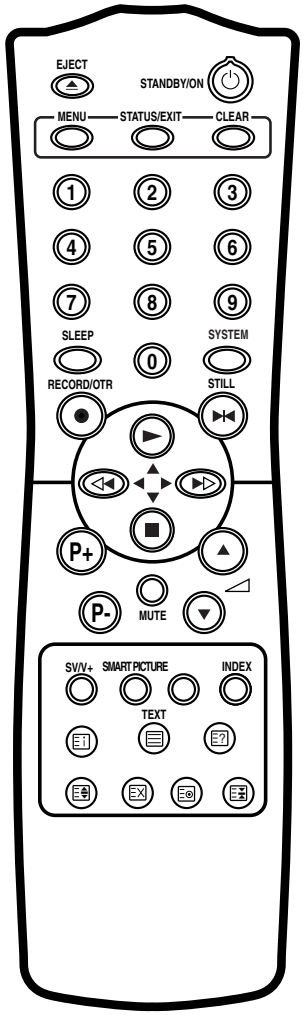
Preparing: 2

1. To eject the tape, press the STOP/EJECT button on the unit (or Remote Control).
2. When you want to record during the Service mode, press the Rec button while depressing SW211 (REC-SAFETY SW) on the Main CBA.



OPERATING CONTROLS AND FUNCTIONS

The remote control



EJECT ⏏ To eject the cassette.

CLEAR To delete last entry/Clear programmed recording (TIMER).

RECORD/OTR ● To record the TV channel selected at this moment or press repeatedly to start a One-Touch Recording.

STILL To stop the tape and show a still picture.

P+ **P-** To select the programme number. During normal or slow motion playback, press to adjust the tracking or vertical jitter.

MUTE To eliminate the sound. Press again to restore the volume.

◿▲ **◿▼** To adjust the volume.

SYSTEM Doesn't work in these models.

SLEEP To select the switch-off time in 30 minutes intervals.

TEXT To switch TELETEXT on or off,or transparent mode.

- : enlarge font
- : switch TELETEXT decoder off temporarily
- : select TELETEXT sub-page
- : recall hidden information
- : stop page changes
- : go back to start page.

SV/V+ **Red button /** To programme recordings with VIDEO Plus+ system or to alter / clear programmed TIMER recordings. Select TELETEXT function when you are in TELETEXT mode.

SMART PICTURE **Green button /** To call up preset picture settings.Select TELETEXT function when you are in TELETEXT mode.

Yellow button/ Select TELETEXT function when you are in TELETEXT mode.

INDEX **Blue button /** Search for the previous/next recording code on the tape in combination with ◁◀◀ / ▶▶▷. Select TELETEXT function when you are in TELETEXT mode.

STANDBY/ON ⏻ To switch TVCR On or Off or to interrupt menu function.

MENU To call up main menu of TVCR.

STATUS/EXIT To access or remove the TVCR's on-screen status display. To exit on-screen menus.

0..9 Press to select channels.

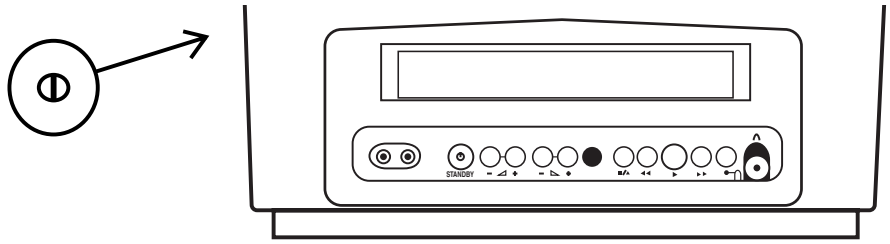
▶▶▷ When tape playback is stopped, press to fast forward the tape at hight speed. During playback, press to fast forward the tape while the picture stay on the screen. To store or confirm entry in the menu. Press to adjust the controls of TVCR menu.

◁◀◀ When tape playback is stoped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.To return the cursor in the menu. Press to adjust the controls of TVCR menu.

▲▶ To play a tape, select an item in the menu of TVCR.

▼■ To stop the tape, select an item in the menu of TVCR.

Front of the device



⏻ **Power switch:** To switch the TV-Video Combi off.

Caution: If you switch off using the power switch, TIMER-recordings are impossible!

⏻ **Standby/on:** To switch TVCR On or Off or to interrupt a menu function.

◿ **Volume:** In connection with the button +, − to adjust the volume.

P- **Programme number minus:** previous programme number

P+ **Programme number plus:** next programme number

● **Record:** To record the programme currently selected.

► **Playback:** To play a recorded cassette.

■/⏏ **Pause/Stop, eject cassette:** To stop the tape; If this key is depressed while in STOP, the cassette is then ejected from the machine.

►► When tape playback is stopped, press to fast forward the tape at high speed.

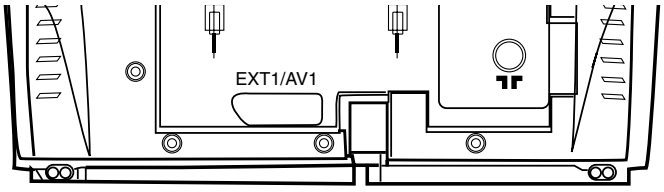
►► When tape playback is stoped, press to rewind the tape at high speed.

Sockets on the front:

White socket / AUDIO **input socket:** To connect a camcorder or video games (audio).
Yellow socket / VIDEO **input socket:** To connect a camcorder or video games (video).

Small socket / 🎧 **socket for headphones:** To connect headphones.

Back of the set



Aerial input socket: To connect the aerial cable.

EXT1/AV1 **Scart socket :**To connect a satellite receiver, decoder, video recorder, etc.

The control lights at the front of machine

STANDBY ◉ **Standby LED:** lights up when the TV-Video Combi has been switched On by means of the main switch.

RECORD ◉ **Recording LED:** lights up during recording.

Fast blink: RECORDING PAUSE; TIMER RECORDING NOT STAND-BY.

Slow blink: TIMER RECORDING is stored in a timer block.

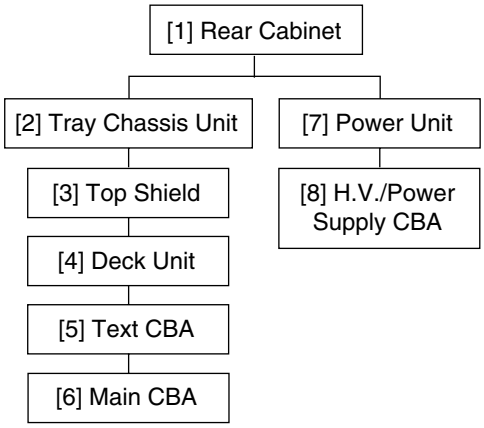
CABINET DISASSEMBLY INSTRUCTIONS

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, and the CBA in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.

Caution !!

When removing the CRT, be sure to discharge the Anode Lead of the CRT with the CRT Ground Wire before removing the Anode Cap.



2. Disassembly Method

ID/ LOC. No.	PART	REMOVAL		
		Fig. No.	REMOVE/ *UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOL-DER	Note
[1]	Rear Cabinet	1, 2	4(S-1), 2(S-2), *CN801	1
[2]	Tray Chassis Unit	3, 6	*CN701,* CN702, *CN503, *CN504, *CN601, *CN602	2
[3]	Top Shield	3, 6	5(S-3)	3
[4]	Deck Unit	3, 6	7(S-4), 2(S-5), Desolder *(CN201, CL401, CL402, CL403)	4
[5]	Text CBA	3, 6	*CN751, *CN752	5
[6]	Main CBA	3, 6	6(S-6)	6
[7]	Power Unit	4,5, 6	Anode Cap, *CN501, CRT CBA, *CN571, 2(S-7)	7
[8]	H.V./Power Supply CBA	4, 6	4(S-8)	8
[9]	CRT	5	4(S-9)	9
↓ (1)	↓ (2)	↓ (3)	↓ (4)	↓ (5)

(1): Order of steps in Procedure. When reassembling, follow the steps in reverse order.These numbers are also used as the identification (location) No. of parts in Figures.

(2): Parts to be removed or installed.

(3): Fig. No. showing Procedure of Part Location.

(4): Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
S=Screw, P=Spring, L=Locking Tab, CN=Connector, *=Unhook, Unlock, Release, Unplug, or Desolder
2(S-2) = two Screw (S-2)

(5): Refer to the following "Reference Notes in the Table."

Reference Notes in the Table

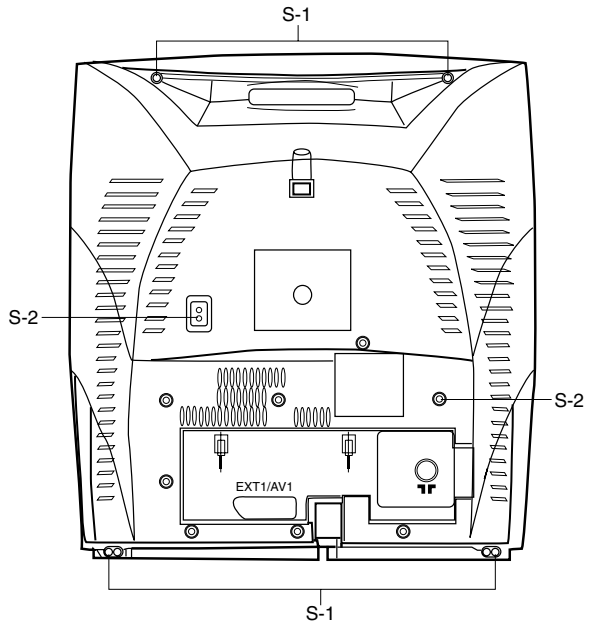
1. Removal of the Rear Cabinet.
   Remove four screws (S-1) and two screws (S-2). Then, disconnect connector CN801.
2. Removal of the Tray Chassis Unit.
   Disconnect connectors CN701, CN702, CN503, CN504, CN601 and CN602. Then pull the Tray Chassis Unit out.
3. Removal of the Top Shield.
   Remove five screws (S-3).
4. Removal of the Deck Unit.
   Remove seven screws (S-4) and two screws (S-5). Then, desolder connectors (CN201, CL401, CL402, CL403) and lift up the Deck Unit.
5. Removal of the Text CBA.
   Disconnect connectors CN751 and CN752. Then, lift the Text CBA up.

6. Removal of the Main CBA.
   Remove six screws (S-6) and pull up the Main CBA.

Caution !!

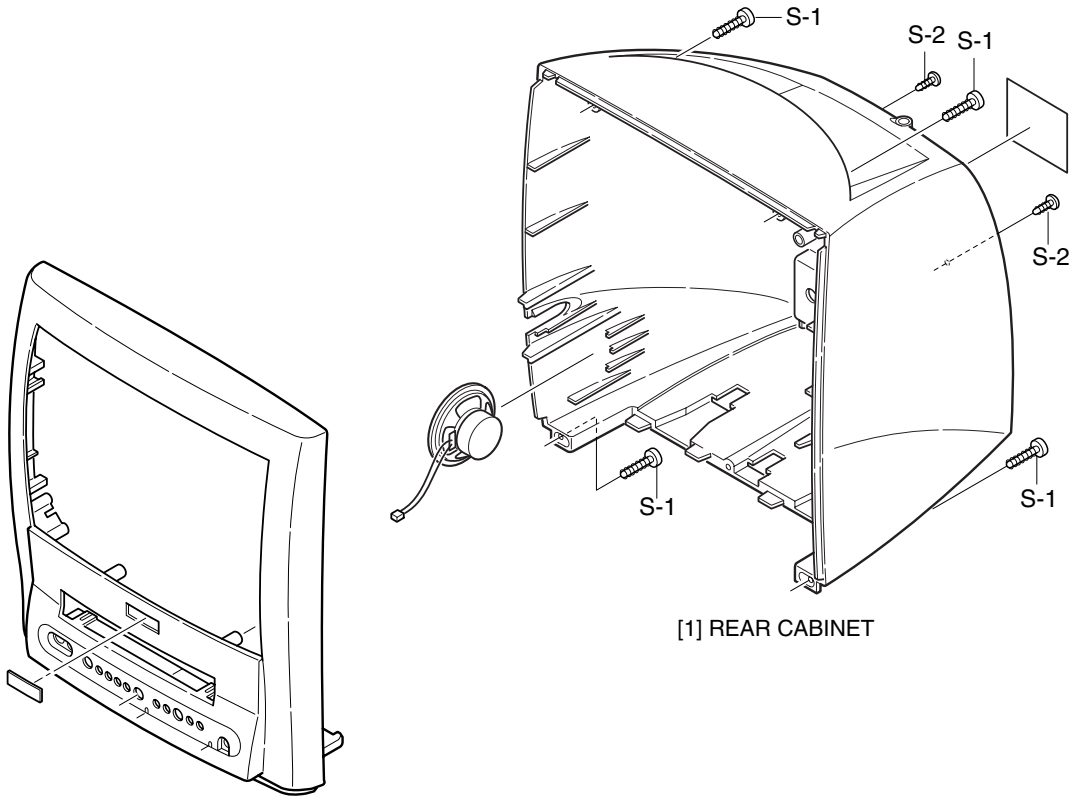
Discharge the Anode Lead of the CRT with the CRT Ground Wire before removing the Anode Cap.

7. Removal of the Power Unit.
   First, discharge the Anode Lead of the CRT with the CRT Ground before removing the Anode Cap.
   Disconnect the following: Anode Cap, CN501, CRT CBA and CN571. Second, remove two screws (S-7). Then, pull the Power Unit backward.
8. Removal of the H.V./Power Supply CBA.
   Remove four screws (S-8) and pull up the H.V./ Power Supply CBA.
9. Removal of the CRT.
   Remove four screws (S-9) and pull the CRT backward.



Screws S1 can be cross slot or torx 10. In case of torx please use screw driver: 4822 395 50423.

Fig. 1



[1] REAR CABINET

Fig. 2

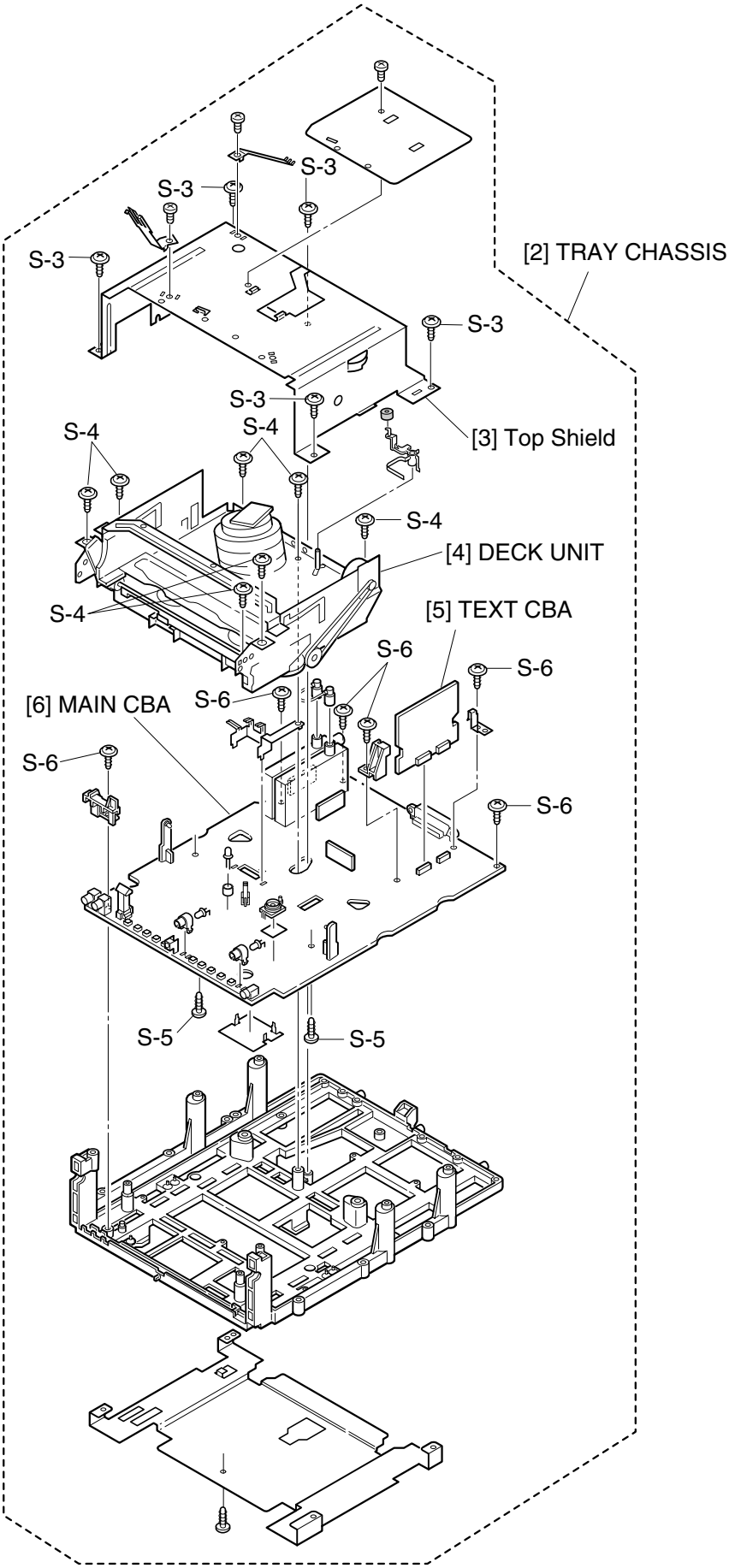

S-3
S-3
S-3
S-3
S-3
[2] TRAY CHASSIS
[3] Top Shield
S-4
S-4
S-4
S-4
[4] DECK UNIT
[5] TEXT CBA
S-6
S-6
S-6
[6] MAIN CBA
S-6
S-6
S-5
S-5

Fig. 3

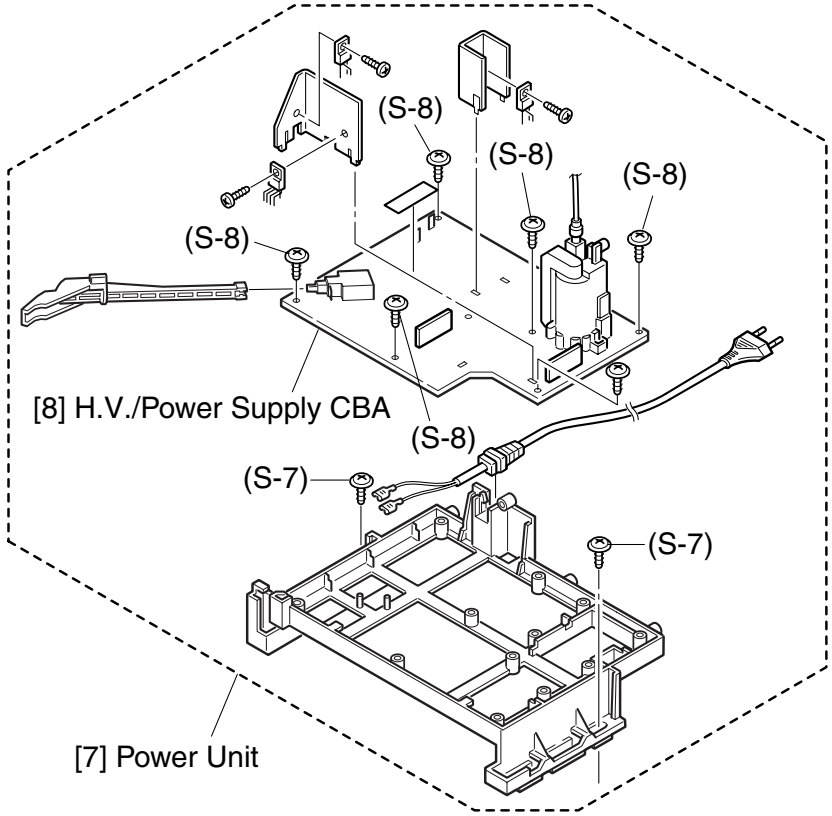

(S-8)
(S-8)
(S-8)
(S-8)
[8] H.V./Power Supply CBA
(S-8)
(S-7)
(S-7)
[7] Power Unit

Fig. 4

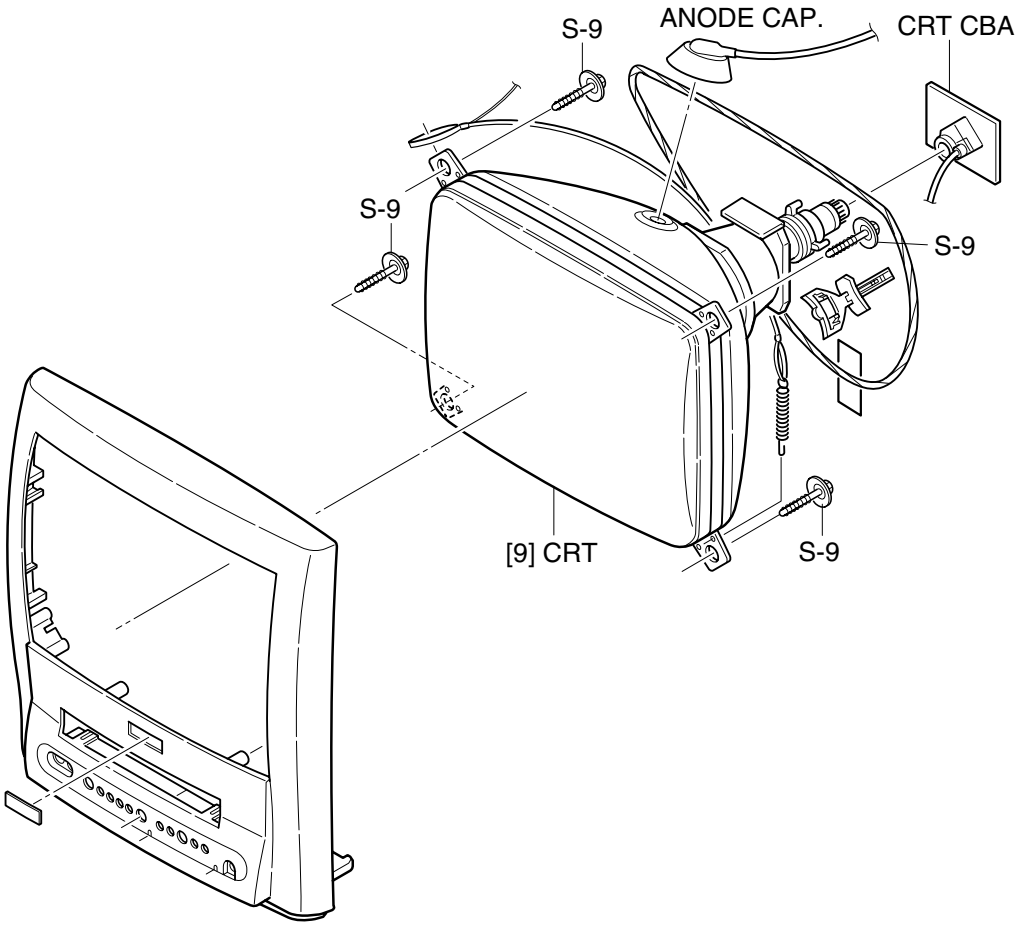

S-9
ANODE CAP.
CRT CBA
S-9
S-9
[9] CRT
S-9

Fig. 5

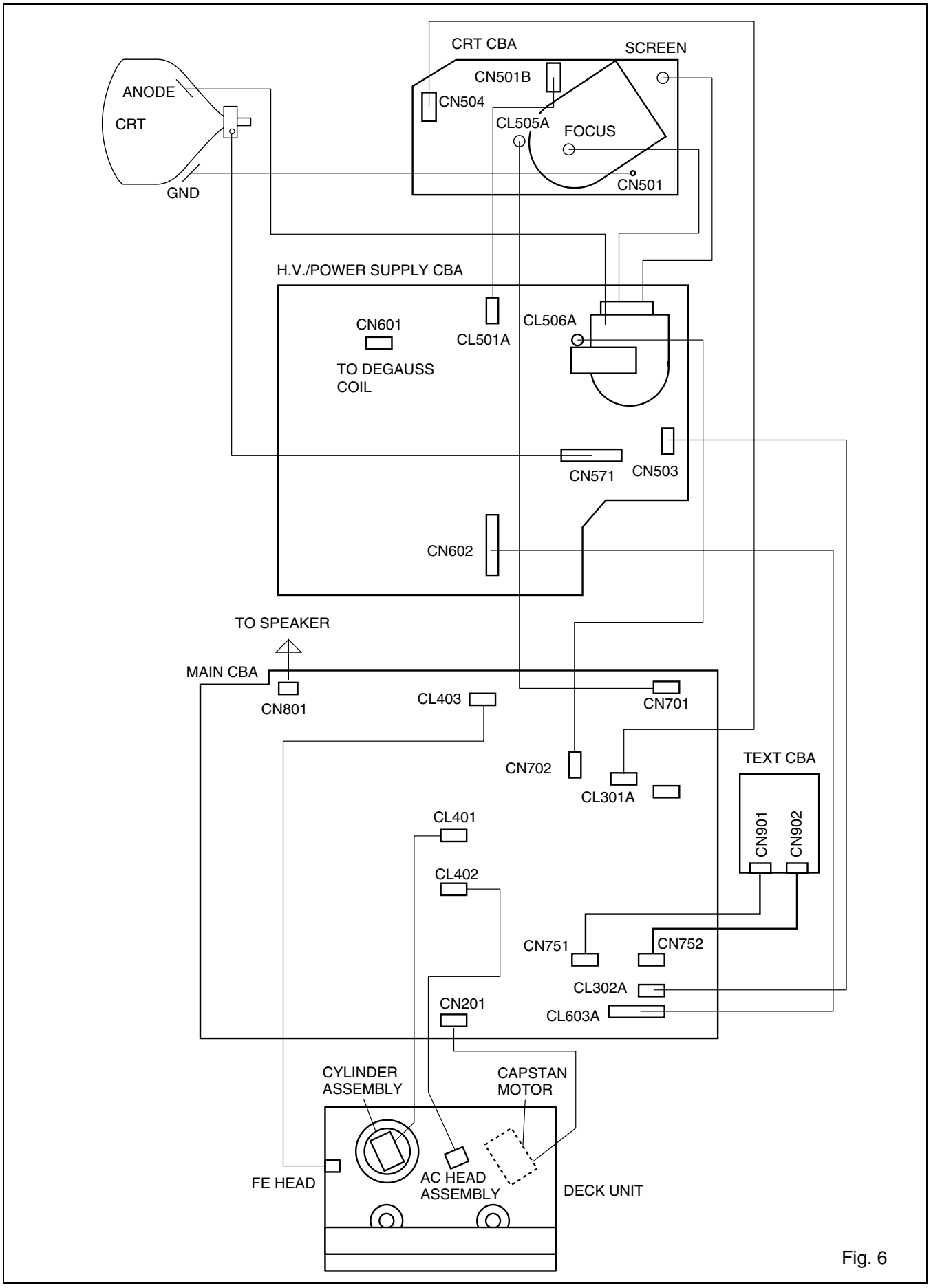

CRT CBA
SCREEN
CN501B
CN504
CL505A
FOCUS
ANODE
CRT
GND
CN501
H.V./POWER SUPPLY CBA
CN601
CL501A
CL506A
TO DEGAUSS
COIL
CN571
CN503
CN602
TO SPEAKER
MAIN CBA
CN801
CL403
CN701
CN702
CL301A
TEXT CBA
CN901
CN902
CL401
CL402
CN751
CN752
CL302A
CN201
CL603A
CYLINDER
ASSEMBLY
CAPSTAN
MOTOR
FE HEAD
AC HEAD
ASSEMBLY
DECK UNIT

Fig. 6

ELECTRICAL ADJUSTMENT INSTRUCTIONS

General Note:

"CBA" is abbreviation for "Circuit Board Assembly."

NOTE:

Electrical adjustments are required after replacing circuit components and certain mechanical parts.
It is important to perform these adjustments only after all repairs and replacements have been completed.
Also, do not attempt these adjustments unless the proper equipment is available.

Test Equipment Required

1. PAL Pattern Generator (Color Bar W/White Window, Red Color, Dot Pattern, Gray Scale, Monoscope, Multi-Burst)
2. AC Milli Voltmeter (RMS)
3. Alignment Tape (FL6A), Blank Tape
4. DC Voltmeter
5. Oscilloscope: Dual-trace with 10:1 probe,
   V-Range: 0.001~50V/Div,
   F-Range: DC~AC-60MHz
6. Frequency Counter
7. Plastic Tip Driver

How to Set up the Service mode:

NOTE:

After replacing the IC202 (Memory) or Main CBA, the set value in IC202 (Memory) will be lost. So it is necessary to set up or adjust in the Service mode after its replacement.

Service Mode:

1. Turn the power on. (Use main power on the TV unit.)
2. Press [STANDBY/ON], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds.

- To cancel the service mode, press [STANDBY/ON] button on the remote control.

How to set up the option code

1. Enter the Service mode.
2. Press the [STATUS/EXIT] button on the remote control unit. The option code appears on the display.
3. If needed, input the option code as shown below using number buttons on the remote control unit.

Model	Option Code
14PV360(365)/01	133566
14PV360(365)/07	133564
14PV360(365)/39	133565
14PV365/58	133567

4. To reset the software, press [PAUSE] and [5] buttons on the remote control unit.
   The option code is changed.

1. DC 105V (+B) Adjustment

Purpose: To obtain correct operation.

Symptom of Misadjustment: The picture is dark and unit does not operate correctly.

Test point	Adj. Point	Mode	Input
TP503 (+B) TP504 (GND)	VR601	---	Color Bar
Tape	M. EQ.	Spec.	
---	DC Voltmeter Plastic Tip Driver	+105±0.5V DC	

Note: TP503(+B), TP504(GND), VR601 --- H.V./Power Supply CBA

1. Connect the unit to AC Power Outlet.
2. Input a color bar signal from RF input and leave it for at least 20 minutes.
   Enter the Service mode. (See page 1-6-1.)
3. Connect DC Volt Meter to TP503(+B) and TP504(GND).
4. Adjust VR601 so that the voltage of TP503(+B) becomes +105±0.5V DC.

2. H Adjustment

Purpose: To get correct horizontal position and size of screen image.

Symptom of Misadjustment: Horizontal position and size of screen image may not be properly displayed.

Test point	Adj. Point	Mode	Input
R583	P+/P- buttons	Video	---
Tape	M. EQ.	Spec.	
---	Frequency Counter	15.625kHz±300Hz	

Note: R583 --- H.V./Power Supply CBA

1. Connect Frequency Counter to R583.
2. Set the unit to the VIDEO mode and no input is necessary. Enter the Service mode. (See page 1-6-1.)
3. Operate the unit for at least 20 minutes.
4. Press [2] button on the remote control unit and select H-Adj Mode.
5. Press [P+/P-] buttons on the remote control unit so that the display will change [0] to [7.] At this moment, choose display [0] to [7] when the Frequency counter display is closest to 15.625kHz±300Hz.
6. Turn the power off and on again.

3. C-Trap Adjustment

Purpose: To get minimum leakage of the color signal carrier.

Symptom of Misadjustment: If C-Trap Adjustment is incorrect, stripes will appear on the screen.

Test point	Adj. Point	Mode	Input
J219 (B-OUT)	P+/P- buttons	---	Color Bar
Tape	M. EQ.	Spec.	
---	Oscilloscope Pattern Generator	200mVp-p Max.	

Figure

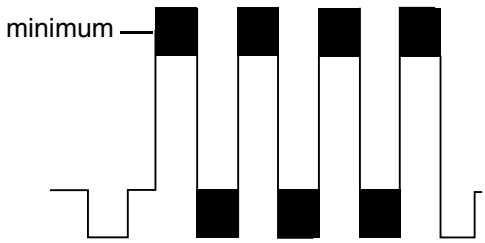


Fig. 1

Note: J219 (B-Out)--- Main CBA

1. Connect Oscilloscope to J219.
2. Input a color bar signal from RF input. Enter the Service mode. (See page 1-6-1.)
3. Press [0] button on the remote control unit and select C-TRAP Mode.
4. Press [P+/P-] buttons on the remote control unit so that the carrier leakage B-Out (4.43MHz) value becomes minimum on the oscilloscope.
5. Turn the power off and on again.

4. How to measure the standard V-ENV value of Digital Studio Picture Control

Purpose: To set the recording condition appropriate for the recording tape.

Symptom of Misadjustment: Recording or playing back picture quality may fall. The picture will be tinted.

1. Insert a new tape (type: TDK 180) for the DSPC alignment into the TV/VCR.
2. Input the black raster signal from the video input jack (VIDEO-IN).
3. Enter the Service Mode. (See page 1-6-1.)
4. To enter the DSPC mode, press [1] button on the remote control unit. Recording starts automatically and “DSPC” appears on the display.

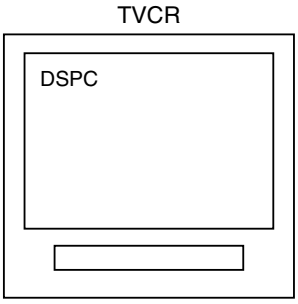


Fig. 2

5. Recording continues for 10 seconds in SP mode. After that, recording starts for 10 seconds in LP mode.
6. The tape is rewinded to the recording start point.
7. The unit enters the play mode automatically and the V-ENV levels of each SP and LP modes are memorized into the EEPROM.
8. "OK" appears on the screen with blueback for 5 seconds, the unit enters the stop mode, and is gone out from the factory mode.
9. If SYNC. and CTL are none, "NG" appears on the screen with blueback for 5 seconds, the unit ejects the cassette and is gone out from the factory mode. Or, also when the V-ENV level in either of the SP and LP mode is written, "NG" appears on the screen with blueback for 5 seconds, the unit ejects the cassette and is gone out from the factory model

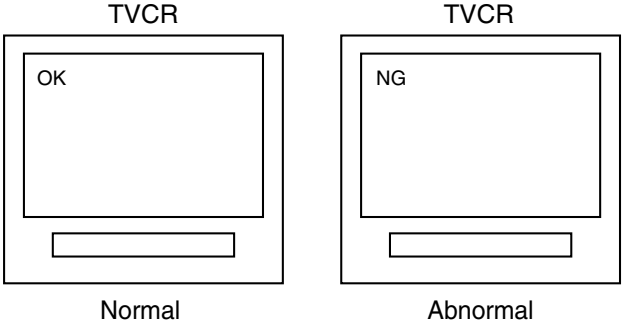


Fig. 3

5. SECAM Black Level Adjustment

Purpose: To set Black Level of the SECAM signal R-Y/B-Y to Ref. level.

Symptom of Misadjustment: If Black Level of the SECAM signal R-Y/B-Y is incorrect, the picture is bluish or reddish in grayscale compared with PAL signal.

Test point	Adj. Point	Mode	Input
Pin 1 of CN303	P+/P- buttons	---	SECAM Gray Scale
Tape	M. EQ.	Spec.	
---	Pattern Generator	---	

1. Degauss the CRT and allow CRT to operate for 20 minutes before starting the alignment.
2. Input the SECAM Gray Scale signal from video input.
3. Enter the Service Mode. (See page 1-6-1.)
4. To enter the C/D/S mode, press [◿ ▼] on the remote control unit.
5. To select SBR (SECAM Black Level R-Y), press [6] button on the remote control unit.
6. Press [P+/P-] buttons to adjust Y signal to the black ref. level.
7. To select SBB (SECAM Black Level B-Y), press [7] button on the remote control unit.
8. Press [P+/P-] buttons to adjust Y signal to the black ref. level.

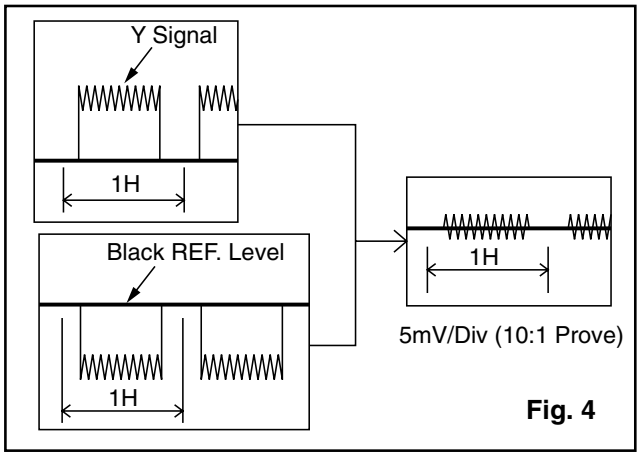


Fig. 4

6. V. Size Adjustment

Purpose: To obtain correct vertical height of screen image.

Symptom of Misadjustment: If V. Size is incorrect, vertical height of image on the screen may not be properly displayed.

Test point	Adj. Point	Mode	Input
Screen	P+/P- buttons	---	Monoscope
Tape	M. EQ.	Spec.	
---	Pattern Generator	90±5%	

1. Enter the Service mode. (See page 1-6-1.)
   Press [9] button on the remote control unit and select V-S Mode. (Press [9] button then display will change to V-P and V-S).
2. Input monoscope pattern.
3. Press [P+/P-] buttons on the remote control unit so that the monoscope pattern is 90±5% of display size and the circle is round.

7. V. Shift Adjustment

Purpose: To obtain correct vertical position of screen image.

Symptom of Misadjustment: If V. position is incorrect, vertical position of image on the screen may not be properly displayed.

Test point	Adj. Point	Mode	Input
Screen	P+/P- buttons	---	Monoscope
Tape	M. EQ.	Spec.	
---	Pattern Generator	90±5%	

1. Enter the Service mode. (See page 1-6-1.)
   Press [9] button on the remote control unit and select V-P Mode. (Press [9] button then display will change to V-P and V-S).
2. Input monoscope pattern.
3. Press [P+/P-] buttons on the remote control unit so that the top and bottom of the monoscope pattern are equal to each other.

8. H. Shift Adjustment

Purpose: To obtain correct horizontal position and size of screen image.

Symptom of Misadjustment: Horizontal position and size of screen image may not be properly displayed.

Test point	Adj. Point	Mode	Input
Screen	P+/P- buttons	---	Monoscope
Tape	M. EQ.	Spec.	
---	Pattern Generator	90±5%	

1. Enter the Service mode. (See page 1-6-1.)
   Press [8] button on the remote control unit and select H-P Mode.
2. Input monoscope pattern.
3. Press [P+/P-] buttons on the remote control unit so that the left and right side of the monoscope pattern are equal to each other.
4. Turn the power off and on again.

9. Cut-off Adjustment

Purpose: To adjust the beam current of R, G, B, and screen voltage.

Symptom of Misadjustment: White color may be reddish, greenish or bluish.

Test point	Adj. Point	Mode	Input
Screen	Screen-Control P+/P-buttons	Ext.	Black Raster
Tape	M. EQ.	Spec.	
---	Pattern Generator	See Reference Notes below	

Figure

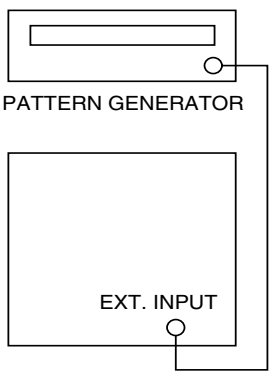


Fig. 5

Notes:

Screen Control (FBT) --- H.V./Power Supply CBA
FBT= Fly Back Transformer
Use the Remote Control Unit

1. Degauss the CRT and allow CRT to operate for 20 minutes before starting the alignment.
2. Set the screen control to minimum position. Input the Black raster signal from RF input.
3. Enter the Service Mode. (See page 1-6-1.)
   Dimmed horizontal line appears on the CRT.
4. To enter the C/D/S mode, press the [◿ ▼] button on the remote control unit.
5. To enter the CUT OFF (R) mode, press [1] button on the remote control unit.
6. Turn the screen control up until dimmed horizontal line appears.
7. Press the [P+/P-] buttons until the horizontal line becomes white.
8. To enter the C/D/S mode, press the [◿ ▼] button on the remote control unit.
9. To enter the CUT OFF (G) mode, press [2] button on the remote control unit.
10. Press the [P+/P-] buttons until the horizontal line becomes white.
11. To enter the C/D/S mode, press the [◿ ▼] button on the remote control unit.
12. To enter the CUT OFF (B) mode, press [3] button on the remote control unit.
13. Press the [P+/P-] buttons until the horizontal line becomes white.
14. Turn the screen control so that the horizontal line adjusted white looks lightly.
15. Turn the power off and on again.

10. White Balance Adjustment

Purpose: To mix red, green and blue beams correctly for pure white.

Symptom of Misadjustment: White becomes bluish or reddish.

Test point	Adj. Point	Mode	Input
Screen	Screen-Control P+/P-buttons	RF	White Raster (APL 100%)
Tape	M. EQ.	Spec.	
---	Pattern Generator Color analyzer	See below	
Figure			

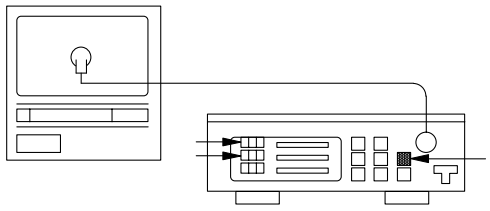


Fig. 6

Note: Use remote control unit

1. Operate the unit more than 20 minutes.
2. Face the unit to east. Degauss the CRT using Degaussing Coil.
3. Input the White Raster (APL 100%).
4. Set the color analyzer to the CHROMA mode and after zero point calibration, bring the optical receptor to the center on the tube surface (CRT).
5. Enter the Service mode. Press [◿ ▼] button on the remote control.
6. Press [4] button on the remote control unit for Red adjustment. Press [5] button on the remote control unit for Blue adjustment.
7. In each color mode, Press [P+/P-] buttons to adjust the values of color.
8. Adjusting Red and Blue color so that the temperature becomes 8500K (x : 290 / y : 300) ±3%.
9. At this time, Re-check that Horizontal line is white. If not, Re-adjust Cut-off Adjustment until the Horizontal Line becomes pure white.
10. Turn off and on again to return to normal mode. Receive APL 100% white signal and Check Chroma temperatures become 8500K (x : 290 / y : 300) ±3%.

Note: Confirm that Cut Off Adj. is correct after this adjustment, and attempt Cut Off Adj. if needed.

11. Sub-Brightness Adjustment

Purpose: To get proper brightness.
Symptom of Misadjustment: If Sub-Brightness is incorrect, proper brightness cannot be obtained by adjusting the Brightness Control.

Test point	Adj. Point	Mode	Input
Screen	P+/P- buttons	---	SYMPTE
Tape	M. EQ.	Spec.	
---	Pattern Generator	See below	

Figure

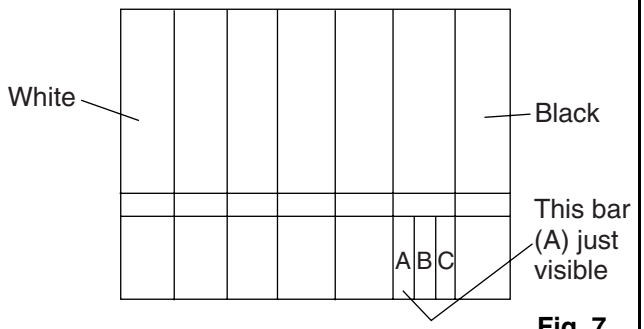


Fig. 7

Note: Bar (A) in Fig. 7 --- 0 IRE

1. Enter the Service Mode. (See page 1-6-1.) Then input SYMPTE signal from RF input.
2. Press MENU button. (Each time MENU button is pressed, display will change BRT, CNT, COL, TNT, and SHP in that order.) Select BRT and press [P+/P-] buttons so that the bar (A) in Fig. 7 is just visible.
3. Turn the power off and on again.

12. Setting for CONTRAST, COLOR, TINT and SHARP Data Values

General

1. Enter the Service mode. (See page 1-6-1)
2. Press MENU button. (Each time MENU button is pressed, display will change BRT, CNT, COL, TNT, and SHP in that order.)

CONTRAST (CNT)

1. Press "MENU" button on the remote control unit. Then select CNT display.
2. Press [P+/P-] buttons on the remote control unit so that the value of "CONTRAST" (CNT) becomes 85.

COLOR (COL)

1. Press "MENU" button on the remote control unit. Then select "COLOR" (CLR) display.
2. Press [P+/P-] buttons on the remote control unit so that the value of "COLOR" (COL) becomes 55.

TINT (TNT)

1. Press "MENU" button on the remote control unit. Then select "TINT" (TNT) display.
2. Press [P+/P-] buttons on the remote control unit so that the value of "TINT" (TNT) becomes 57.

SHARP (SHP)

1. Press "MENU" button on the remote control unit. Then select "SHARP" (SHP) display.
2. Press [P+/P-] buttons on the remote control unit and select "1."

13. Focus Adjustment

Purpose: Set the optimum Focus.

Symptom of Misadjustment: If Focus Adjustment is incorrect, blurred images are shown on the display.

Test point	Adj. Point	Mode	Input
Screen	Focus Control	---	Monoscope
Tape	M. EQ.	Spec.	
---	Pattern Generator	See below.	

Note: Focus VR (FBT) --- H.V./Power Supply CBA

FBT= Fly Back Transformer

1. Operate the unit more than 30 minutes.
2. Face the unit to the East and degauss the CRT using a Degaussing Coil.
3. Input the monoscope pattern.
4. Adjust the Focus Control on the FBT to obtain clear picture.

14. Head Switching Position Adjustment

Purpose: Determine the Head Switching Point during Playback.

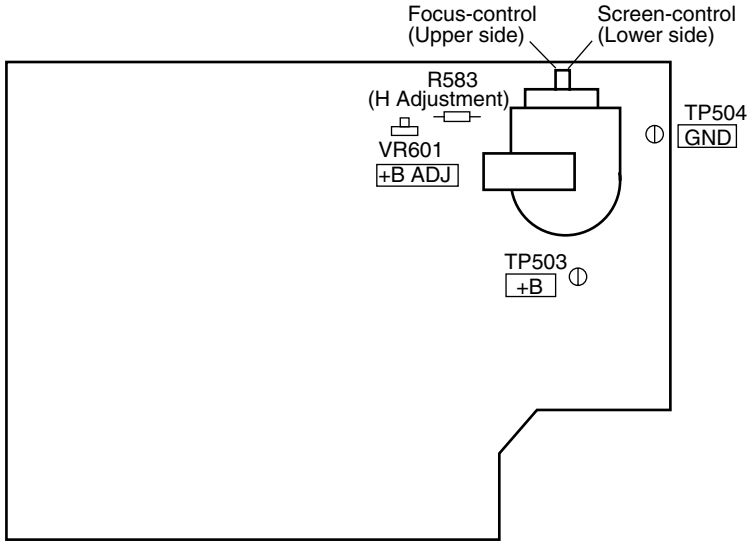
Symptom of Misadjustment: May cause Head Switching Noise or Vertical Jitter in the picture.

Note: Unit reads Head Switching Position automatically and displays it on the screen (Upper Left Corner).

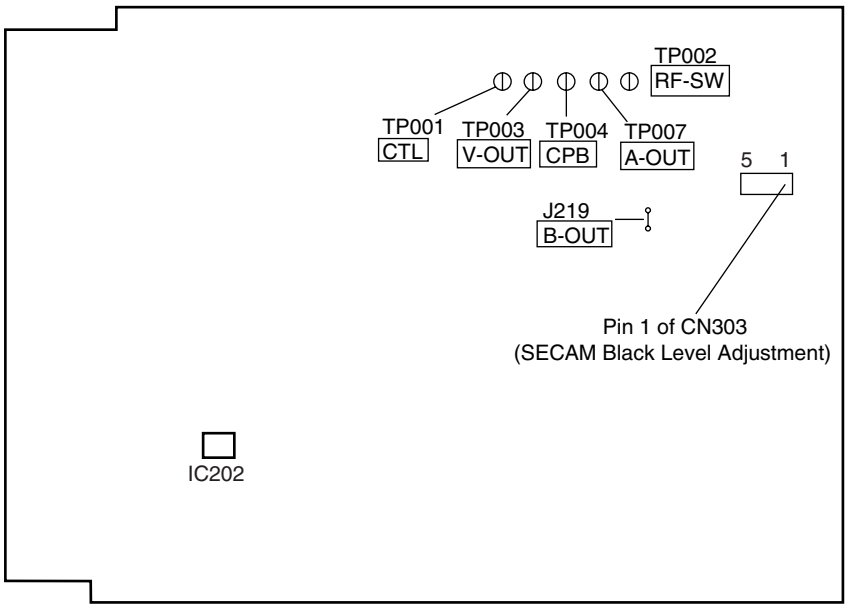
1. Enter the Service Mode. (See page 1-6-1.)
   Then press the number [5] button on the remote control unit.
2. Playback the test tape (FL6A).
3. The Head Switching position will display on the screen; if adjustment is necessary follow step 4. 6.5H(412.7μs) is preferable.
4. Press [P+/P-] buttons on the remote control unit if necessary. The value will be changed in 0.5H steps up or down. Adjustable range is up to 9.5H. If the value is beyond adjustable range, the display will change as:
   Lower out of range: 0.0H
   Upper out of range: -.-H
5. Turn the power off and on again.

Adjustment Points and Test Points

H.V./Power Supply CBA Top View



Main CBA Top View



TEST POINT INFORMATION

⏀: Indicates a test point with a jumper wire across a hole in the PCB.

TEST POINTS NOT USED IN ELECTRICAL ADJUSTMENTS

Test Point	Used in:	Page No.
TP001	Mechanical Alignment Procedures	2-3-3
TP002	Mechanical Alignment Procedures	2-3-3, 2-3-4
TP004	Mechanical Alignment Procedures	2-3-3, 2-3-4
TP503	Electrical Adjustment Instructions	1-6-1
TP504	Electrical Adjustment Instructions	1-6-1

BLOCK DIAGRAMS

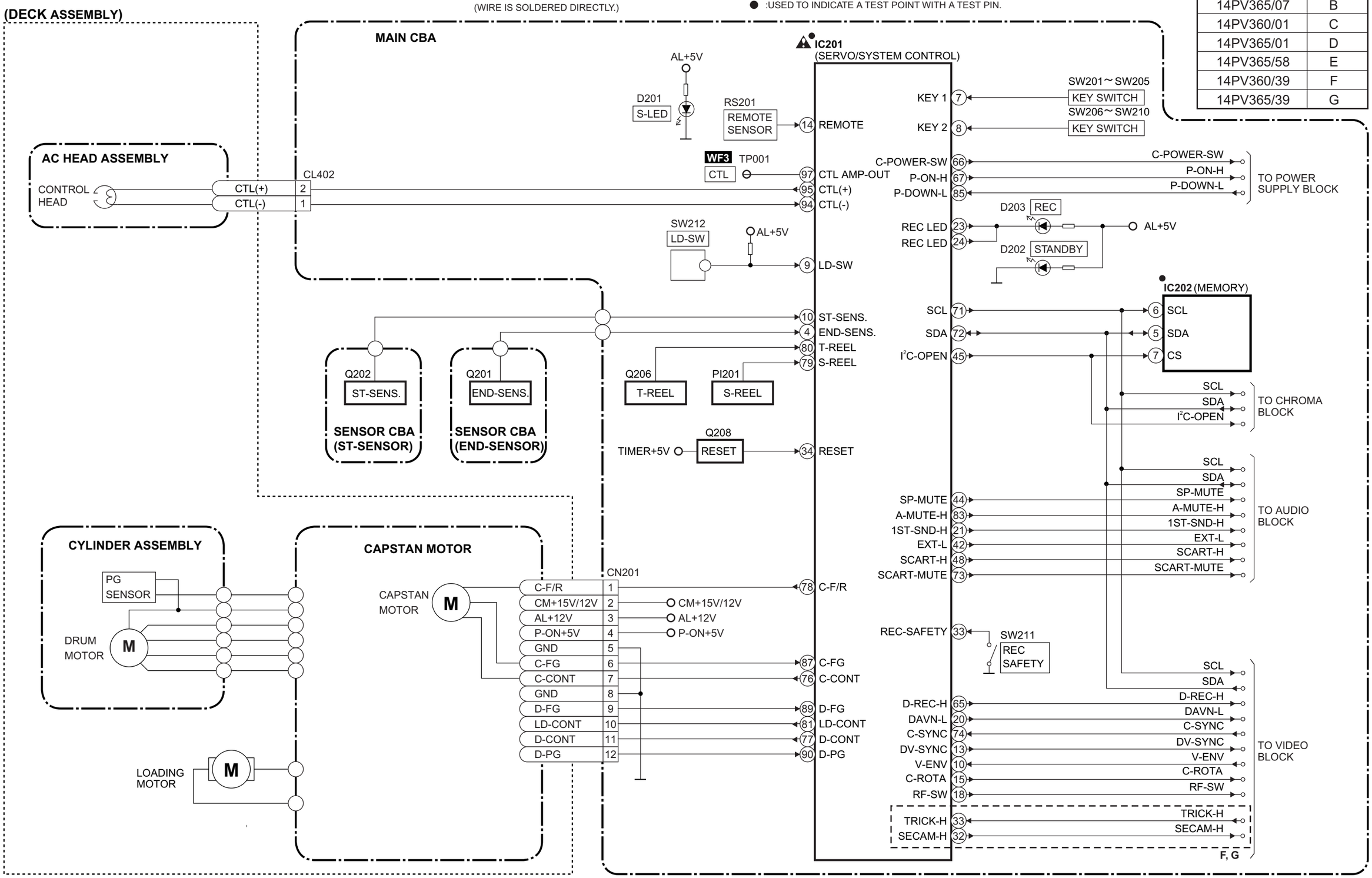
Servo/System Control Block Diagram

NOTE FOR WIRE CONNECTORS:
1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

TEST POINT INFORMATION
- ⓘ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ▭→ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊘ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

Comparison Chart of Models & Marks

Model	Mark
14PV360/07	A
14PV365/07	B
14PV360/01	C
14PV365/01	D
14PV365/58	E
14PV360/39	F
14PV365/39	G



Video Block Diagram

NOTE FOR WIRE CONNECTORS:
1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

"● " = SMD

TEST POINT INFORMATION
- ⓘ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ▭→ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊘ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

REC-VIDEO SIGNAL **PB-VIDEO SIGNAL** **MODE: SP/REC**

MAIN CBA

IC101 (VPS)
DAVN-L (14)
SDA (6)
SCL (7)
VPS-V (16)

FROM SERVO/SYSTEM CONTROL BLOCK
DAVN-L
SDA
SCL

TO CHROMA BLOCK
C-VIDEO

CN701
GND 1
GND 2
GND 3
GND 4
TO CRT/H.V. BLOCK CN505

TU001
TU-VIDE01 (24)
TU002
TU-VIDE02 (24)
JK701 V-IN

● **IC401** (VIDEO/AUDIO SIGNAL PROCESS)
65 43 46 68 69 78 79

Y. DELAY
SERIAL DECORDER
LUMINANCE SIGNAL PROCESS
R P
SP HEAD AMP
96 95 93 94
CL401
V(R) 1
V-COM 2
V(L) 3

(DECK ASSEMBLY)
CYLINDER ASSEMBLY
VIDEO (R) HEAD
VIDEO (L) HEAD

WF4
48 50 52 54 56
TUNER1
TUNER2
SCART
LINE
SCART
LINE
PB/EE
MUTE
TUNER1
TUNER2
PB/EE
MUTE

JK751
V-IN (20)
V-OUT (19)
Q752 BUFFER
Q751 BUFFER

BYPASS AGC
CHARA. INS.
1/2
CCD 1H DELAY
CHROMINANCE SIGNAL PROCESS
Y/C MIX
FBC
R P
AGC
VXO
Y
C
REC FM AGC
R P R P

WF1
TP002
RF-SW

D-REC-H (80)
RF-SW/C-ROTA (70)
D-V-SYNC (62)
V-ENV (84)
C-SYNC (67)
D-REC-H
RF-SW
C-ROTA
D-V-SYNC
V-ENV
C-SYNC
FROM/TO SERVO/SYSTEM CONTROL BLOCK

WF5
TP003
V-OUT
TU1-VIDEO
VIDEO-OUT1
TO CHROMA BLOCK
Q401 BUFFER (61)
Q402 BUFFER (63)

58 59 28 29 21 44
WF2
X401 4.43MHz
Q471 BUFFER
TP004
C-PB
WF6
PB-H OUT

F, G
TRICK-H
SECAM-H
IC471 (PAL/SECAM DECTECOTR)
28 1 29 17 12 2 16 14
PAL/SECAM DETECTOR

Comparison Chart of Models & Marks

Model	Mark
14PV360/07	A
14PV365/07	B
14PV360/01	C
14PV365/01	D
14PV365/58	E
14PV360/39	F
14PV365/39	G

Audio Block Diagram

NOTE FOR WIRE CONNECTORS:
1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

TEST POINT INFORMATION
- ⓘ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ▭→ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊘ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

" ● " = SMD

PB-AUDIO SIGNAL REC-AUDIO SIGNAL Mode : SP/REC

MAIN CBA

TU001
TU-AUDIO 21
TU002
TU-AUDIO 21

IC301 (VIDEO/AUDIO/CHROMA/DEFLECTION/IF)
WF7
52 TUNER1
53 LINE
54 AUDIO MUTE
ATT
50

IC801 (AMP)
7 OUTPUT AMP 1
MUTE 5

JK801
HEADPHONE JACK

CN801
SP 1
SP-GND 2
SP801
SPEAKER

IC754 (SW)
15 TU1
TU2 1 2
SW CTL
9 10 11

JK702
A-IN

IC751 (SW)
1 2 15
5 3 4
13 12 14
SW CTL
11 10 9

JK751
A-IN(R) 2
A-IN(L) 6
A-OUT(R) 1
A-OUT(L) 3

Q758

SCART-H
EXT-L
1ST-SND-H
SCART-MUTE
TO SERVO /SYSTEM CONTROL BLOCK

SP-MUTE1
(FROM PIN 44 OF IC201)

IC401
(AUDIO SIGNAL PROCESS)
TUNER1 13
TUNER2 15
LINE 17
PB-ON
5 6
EQ AMP
WF9
8 9
INV
ATT
R P
ALC DET
ALC
LINE AMP
MUTE
12 11
TP007
A-OUT
WF8
SP/LP-ON
7
+5V
Q852
REC-ON
1 2
AUTO BIAS
3 100
REC AMP
Q853
BIAS OSC
Q851
Q854(PB=ON)
Q856
SWITCHING D-REC-OFF
+5V
Q855(PB=ON)
SERIAL DECODER
AUDIO HD-SW CONTROL
16
68 69 71
A-MUTE-H
SDA
SCL
TO SERVO/SYSTEM CONTROL BLOCK

(DECK ASSEMBLY)

AUDIO HEAD
AUDIO ERASE HEAD
ACE HEAD ASSEMBLY

CL402
3 A-PB/REC
4 A-COM
6 AE-H
5 FE-H

FULL ERASE HEAD
FE HEAD

CL403
1 FE-H
2 FE-H-GND

Chroma Block Diagram

"● " = SMD

NOTE FOR WIRE CONNECTORS:
1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

TEST POINT INFORMATION
- ⦶ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ▭→ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊘ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

REC-AUDIO SIGNAL **REC VIDEO SIGNAL** **PB VIDEO SIGNAL** **Mode : SP/REC**

TEXT CBA

IC901 (TELETEXT DECODER)
ADC/DATA SLICER (11)
SYNC SW (20) Q904 BUFFER
(19) Q901 BUFFER
I²C I/F (3) (2)
TELETEXT DECODER (27) (28) (29) (30)
OSC/CLOCK GENERATOR (41) (42) X901 13.875 MHz OSC

CN901 CN751
7 Y-SW-OUT 7
2 SYNC 2
4 SDA 4
3 SCL 3

CN902 CN752
6 OSD-BLK 6
3 OSD-B 3
4 OSD-G 4
2 OSD-R 2

(NO CONNECTION) CN303
INT.MONITOR 1
I²C-OPEN 2
SDA 4
SCL 5
(CN303 is used for adjustment at factory)

FROM/TO SERVO/SYSTEM CONTROL BLOCK
I²C-OPEN
SCL
SDA

JK751
SLOW-SW (8)
RAPID-SW (16)
OSD-B (7)
OSD-G (11)
OSD-R (15)

IC752 (SW)
(5) (3) (2) (1) (12) (13) → (4) (15) (14)
SW CTL (9) (10) (11)
Q756

IC201 (SYSTEM CONTROL/OSD)
FROM VIDEO BLOCK C-VIDEO (56) → C-VIDEO
TEXT-L (82)
OSD-R (64)
OSD-G (63)
OSD-B (62)
OSD-BLK (60)
SLOW-SW-IN (30)
RGB CONT (22)
RAPID-SW-IN (29)
WF18 V-SYNC (59)
WF17 H-SYNC (58)

+5V
Q757
Q761
Q759
Q760
+5V

MAIN CBA

IC301 (VIDEO/AUDIO/CHROMA/DEFLECTION/IF)
(40) (1)
(10) (11) SERIAL I/F
(43) INTELLIGENT MONITORING
SYNC SEPARATION
V-SYNC PROCESS CIRCUIT
H-SYNC PROCESS CIRCUIT
(17) (21)
(27) (20) (28) (30)
WF10 (13) (12) INV

LINE/PB (34) TUNER
LINE/PB (36) TUNER
VIDEO-OUT1 TU1-VIDEO FROM VIDEO BLOCK

CHROMA TRAP
CHROMA BPF
CLOCK CONTROL CIRCUIT (32)
X301 4.43MHz
LUMA SIGNAL PROCESS CIRCUIT
PAL DECODER
SECAM DECODER
BASE BAND 1H DELAY LINE
OSD MIX/RBG MATRIX/ BLANKING

(16) (15) (14)
CL301A
2 BLUE
3 GREEN
4 RED
TO CRT/H.V. BLOCK CL301B

WF11
(6) (7) (31)
CL302A
2 AFC
3 H-DRIVE
6 ACL
4 V-RAMP-NF
7 V-DRIVE
FROM/TO CRT/H.V. BLOCK CL302B

CRT/H.V. Block Diagram

NOTE FOR WIRE CONNECTORS:
1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

"● " = SMD

TEST POINT INFORMATION
- ⓘ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ▭→ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊘ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

REC VIDEO SIGNAL **PB VIDEO SIGNAL** **Mode : SP/REC**

H.V./POWER SUPPLY CBA

IC551 (V-DEFLECTION CONTROL)
THERMAL PROTECTION
AMP
PUMP UP
VCC
7 1 5 6 3 2

Q572 H.DRIVE
WF12
Q571 H.OUTPUT
T572

WF13
L551 DEFLECTION-YOKE
5 V-DRIVE
4
3 H-DRIVE
1
CN571

FROM POWER SUPPLY BLOCK
+B
DEF+B

T571 F.B.T.
FOCUS VR
HV F S 11
1 5 3 4 8 10 7 9 6

ANODE
FOCUS
SCREEN
SCREEN VR
ANODE

JUNCTION-B CBA
FROM/TO CHROMA BLOCK CL302A

CL302B	CN302		CN503
2	2	AFC	2
3	3	H-DRIVE	3
6	6	ACL	6
4	4	V-RAMP-NF	4
7	7	V-DRIVE	7

CL501A
1 HEATER 1
3 P-ON+160V 3
CL501B

JUNCTION-D CBA
CN505
1
2
3
4
TO VIDEO BLOCK CN701
CL505B
CL505A

JUNCTION-C CBA
FROM CHROMA BLOCK CL301A

CL301B	CN301		CN504
4	4	RED	4
3	3	GREEN	3
2	2	BLUE	2

Q501 RED AMP WF14
Q502 GREEN AMP WF15
BLUE AMP Q503 WF16

JK501
FOCUS
SCREEN
GND
R
G
B
HEATER
V501 CRT
CN501
GND

CRT CBA

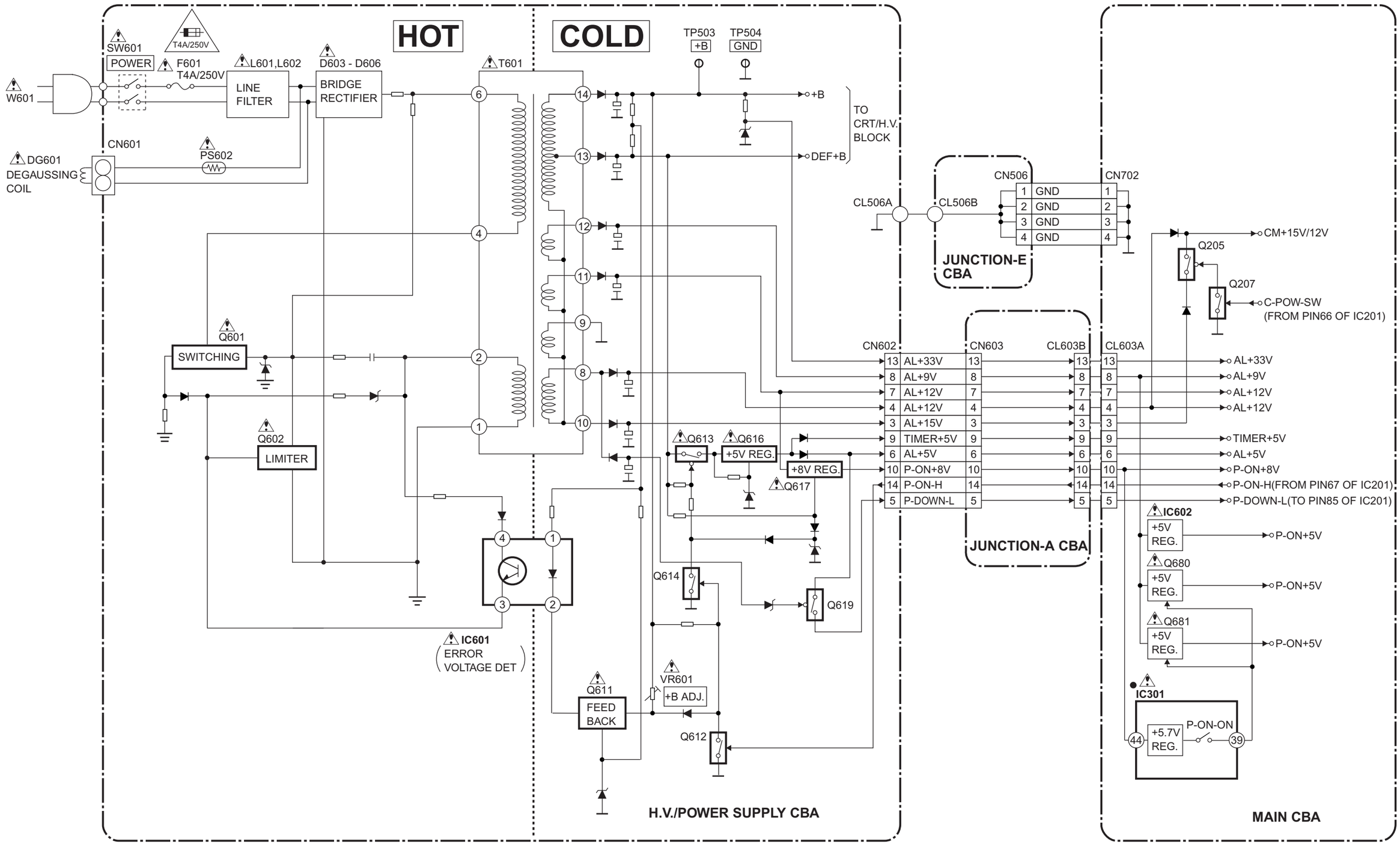
Power Supply Block Diagram

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

4A/125V

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES
D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole reprèsente un fusible à fusion rapide."

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



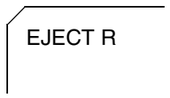
MECHANICAL TROUBLE INDICATOR

1, Each Malfunction Indication

If the MONITOR is turned ON right after the Mechanical Malfunction occurs or POWER SAFETY/X-RAY is turned ON, display the following character to show Malfunction after the EJECT display.

Immediately preceding Malfunction	Display character
REEL Malfunction	R
DRUM Malfunction	D
CASSETTE LOADING Malfunction	C
TAPE LOADING Malfunction	T
P-SAFETY 1	1
P-SAFETY 2	2
X-RAY	X

Example: If REEL Malfunction



2, Each Malfunction evaluation method

X-RAY protect

If X-RAY port becomes continuously 2.5V or more for 120 msec. (4 times 40 msec. interval), the unit shall immediately turn OFF the POWER/MONITOR and switch over to the Mechanical Malfunction mode with POWER OFF.

(To return from this mode shall become possible only by POWER Key as in the case of the Mechanical Malfunction).

POWER SAFETY

1) POWER SAFETY 1

   If P-SAFETY 1 port becomes continuously 2.5V or less for 120 msec. (4 times 40 msec. interval) when MONITOR is ON, the unit shall be assumed to be the Power Malfunction 1 and immediately turn OFF the POWER/MONITOR and switch over the Mechanical Malfunction mode with POWER OFF.

   (To return from this mode shall become possible only by POWER Key as in the case of the Mechanical Malfunction).

   * However the POWER SAFETY 1 function shall be disabled during 500 msec. right after the MONITOR turns ON.

2) POWER SAFETY 2

   If P-SAFETY 2 port becomes continuously 2.5V or less for 120 msec. (4 times 40 msec. interval) when P-ON-H port is ON, the unit shall be assumed to be the Power Malfunction 2 and immediately turn OFF the POWER/MONITOR and switch over the Mechanical Malfunction mode with POWER OFF.

   (To return from this mode shall become possible only by POWER Key as in the case of the Mechanical Malfunction).

   * However the POWER SAFETY 2 function shall be disabled during 500 msec. right after the P-ON-H port turns ON.

Mechanical Malfunction determination

1) REEL Malfunction detection

   Countermeasure for REEL and CAPSTAN motor rotation malfunction (Except CASSETTE LOADING function)

   After the Malfunction detection with REEL/CAPSTAN sensor, the unit shall switch over to STOP (B) and be REEL Mechanical Malfunction.

a) If the T-REEL pulse is not impressed after a lapse of 7 sec. at SP, 14 sec. at LP, or more in the REEL Rotation Mode like PLAY/REC, FS/RS Mode, and the T-REEL or S-REEL pulse is not impress after a lapse of 4 sec. or more in REEL Rotation Mode of FF/REW, it shall be assumed to stop the rotation and switch over to STOP (B) position, then POWER be turned OFF and the unit be REEL Mechanical Malfunction. (T-REEL and S-REEL for the models on S-REEL and only T-REEL for other models)

b) If the C-FG pulse is not impressed for a lapse of 1 sec. or more during the CAPSTAN MOTOR rotation, it shall be MOTOR Rotation Malfunction (REEL Malfunction).

2) DRUM Malfunction detection

   Detect the DRUM rotation at the D-FG input terminal.

   If the variation of D-FG input level is not detected for a lapse of 1 sec. or more when D-CONT is "H", it shall be assumed to be Rotation Malfunction and be DRUM Malfunction.

   When detect Drum Malfunction, POWER shall be turned OFF after the unit switches over to STOP (B) Mode.

3) Countermeasure for TAPE LOADING Malfunction

   Detect the Malfunction with the LOADING Switch.

a) TAPE LOADING Malfunction

   If LD-SW does not go to the established position after a lapse of 7 sec. or more from TAPE LOADING or TAPE UNLOADING start, the LOADING function shall immediately be stopped and POWER be turned OFF, and inform the Timer about the LOADING Mechanical Malfunction.

b) LD-SW Position Malfunction at each mode

   When the unit operates at each mode, even if the LD-SW position changes from the established one in its mode, it keeps the function according to its mode.

4) Countermeasure for CASSETTE LOADING Malfunction

a) CASSETTE IN operating Malfunction

   If LD-SW does not go to SB position after a lapse of 5 sec. or more from the CASSETTE insertion start, the unit starts the CASSETTE OUT operation.

   After switch over to CASSETTE OUT operation and then a laps of 5 sec. or more from the CASSETTE OUT operation start, if LD-SW does not go to the EJ position or if START Sensor and END Sensor does not turn "ON" at the EJ position, the unit starts again to insert CASSETTE.

   (However in S-INH state, the START/END Sensor shall be disabled).

b) CASSETTE OUT operating Malfunction

   After a lapse of 5 sec. or more from CASSETTE OUT operation start, if LD-SW does not go to the EJ position or if START Sensor and END Sensor does not turn "ON" at the EJ position, the unit starts to insert CASSETTE.

   (However in S-INH state, the START/END Sensor shall be disabled).

   ↓

   When the unit switches over to CASSETTE insertion at CASSETTE IN or CASSETTE OUT Malfunction, if LD-SW does not go to the SB position after a lapse of 5 sec. or more from CASSETTE insertion start, the function shall immediately be stopped and POWER be turned OFF, and the unit be CASSETTE LOADING Malfunction.

c) When POWER is turned ON, if the CL position or GC position cannot be detected after 5 sec. LD-REV operation and 5 sec. LD-FWD operation, the function shall immediately be stopped and POWER be turned OFF, and the unit be CASSETTE LOADING Malfunction.

d) When POWER is turned ON without CASSETTE (EJ position) and LD-SW is monitored all the time, if the CL or GC position is detected continuously for 1 sec. or more, the POWER shall be turned OFF and the unit be CASSETTE LOADING Malfunction.

Countermeasure for Mechanical Malfunction

If the unit detects Mechanical Malfunction, turn the POWER OFF. If the unit is Mechanical Malfunction, Key input except POWER key shall be disabled and CASSETTE insertion disabled. When POWER Key is entered, the POWER is turned ON and the unit switches over the EJECT Mode. (Return with POWER ON)

SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

WARNING

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark " ⚠ " in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

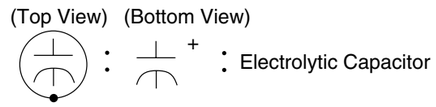
Capacitor Temperature Markings

Mark	Capacity change rate	Standard temperature	Temperature range
(B)	±10%	20°C	-25~+85°C
(F)	+30 - 80%	20°C	–25~+85°C
(SR)	±15%	20°C	–25~+85°C
(Y)	±22.5%	20°C	–25~+85°C

Capacitors and transistors are represented by the following symbols.

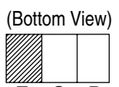
< PCB Symbols >

(Top View) (Bottom View)



: Electrolytic Capacitor

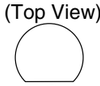
(Bottom View)



: Transistor or Digital Transistor

E C B

(Top View)



NPN Transistor

E C B

(Top View)

PNP Transistor

E C B

(Top View)

NPN Digital Transistor

E C B

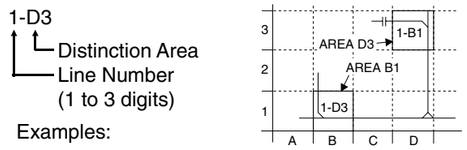
(Top View)

PNP Digital Transistor

E C B

Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.
3. Prefix symbol "CN" means "connector" (can disconnect and reconnect).
   Prefix symbol "CL" means "wire-solder holes of the PCB" (wire is soldered directly).
4. How to read converged lines.

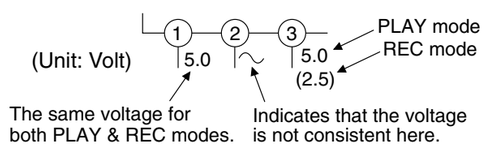


Examples:

(1). "1-D3" means that line number "1" goes to area "D3."

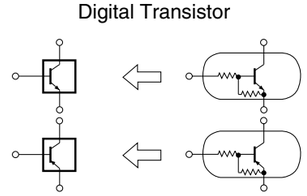
(2). "1-B1" means that line number "1" goes to area "B1."

5. All resistance values are indicated in ohms (K=10^3, M=10^6).
6. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
7. All capacitance values are indicated in μF (P=10^{-6} μF).
8. All voltages are DC voltages unless otherwise specified.
9. Voltage indications for PLAY and REC modes on the schematics are as shown below.



< Schematic Diagram Symbols >

Digital Transistor



Main 1/4 Schematic Diagram Parts Location Guide

Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		CAPACITORS		DIODES		RESISTORS		RESISTORS	
C101	C-4	C247	E-5	D686	A-1	R218	A-4	R271	D-5
C102	C-4	C248	F-5	ICS		R219	A-4	R273	B-3
C103	B-5	C249	E-5	IC101	C-5	R220	A-4	R274	F-2
C104	B-5	C250	A-3	IC201	D-3	R221	C-3	R275	A-2
C105	C-5	C251	A-3	IC202	E-5	R222	C-3	R276	F-2
C106	C-5	C252	A-3	IC602	B-2	R223	C-3	R277	F-5
C107	B-5	C253	A-2	COILS		R224	C-4	R278	C-5
C201	C-4	C255	E-2	L101	C-5	R225	C-2	R283	C-4
C202	C-4	C256	F-2	L201	A-2	R226	C-3	R284	E-4
C203	C-4	C257	A-3	L202	F-2	R227	C-1	R285	F-4
C204	B-3	C259	D-5	L203	A-2	R228	C-2	R680	B-2
C205	B-3	C260	D-5	TRANSISTORS		R229	D-4	R681	B-2
C206	C-3	C261	A-2	Q201	A-4	R231	C-1	R682	B-1
C207	C-1	C262	C-4	Q202	A-5	R232	D-1	R683	B-1
C208	C-3	C681	B-2	Q205	A-2	R233	C-1	R684	B-1
C210	D-1	C682	B-1	Q206	E-4	R234	D-1	R685	B-1
C211	D-1	C683	B-1	Q207	A-2	R236	D-1	R686	B-1
C212	D-1	C684	B-1	Q208	D-1	R237	A-2	R687	B-1
C213	D-1	C685	B-1	Q680	B-1	R238	D-1	R688	B-2
C214	D-1	C687	B-1	Q681	B-1	R239	D-1	SWITCHES	
C215	D-1	CONNECTORS		Q682	B-2	R240	D-1	SW201	B-4
C216	D-1	CN201	A-3	RESISTORS		R241	D-2	SW202	A-4
C217	D-1	CL603A	A-1	R102	C-4	R242	E-1	SW203	A-4
C218	D-1	DIODES		R103	C-4	R243	A-2	SW204	A-4
C219	D-1	D201	C-3	R104	C-5	R244	A-2	SW205	A-4
C220	E-2	D202	C-2	R105	C-5	R245	E-1	SW206	B-3
C221	E-1	D203	C-2	R106	C-5	R246	F-2	SW207	A-3
C222	E-2	D206	E-5	R107	B-5	R247	E-2	SW208	A-3
C223	F-2	D207	E-5	R201	C-4	R248	E-2	SW209	A-3
C224	F-2	D208	A-2	R202	C-4	R249	E-2	SW210	A-3
C225	F-2	D210	A-3	R203	C-4	R250	E-2	SW211	C-2
C232	F-4	D211	B-3	R204	C-4	R257	E-3	SW212	A-4
C233	F-4	D212	E-4	R205	B-4	R258	E-3	TEST POINTS	
C234	E-4	D213	D-5	R206	B-4	R259	F-5	TP001	D-5
C235	E-5	D214	C-4	R207	A-4	R260	F-5	TP002	C-3
C236	E-4	D215	C-4	R208	A-4	R261	F-5	CRYSTAL OSCILATORS	
C237	D-5	D216	E-1	R209	A-4	R262	F-5	X201	D-1
C238	D-5	D217	E-1	R210	B-3	R263	E-4	X202	D-1
C239	D-4	D218	C-4	R211	B-3	R264	F-4	MISCELLANEOUS	
C240	D-5	D680	C-2	R212	A-3	R265	E-4	CF101	B-4
C241	D-4	D681	C-1	R213	A-3	R266	F-4	PI201	F-4
C242	D-5	D682	B-2	R214	A-3	R267	F-4	RS201	C-2
C243	D-4	D683	C-1	R215	B-4	R268	E-5		
C245	D-5	D684	C-1	R216	B-4	R269	E-5		
C246	E-5	D685	B-2	R217	A-4	R270	D-4		

VOLTAGE CHART (Power off mode)

Ref. No.	1	2	3
IC602	3.2	0	1.9
Ref. No.	E	C	B
Q680	1.6	3.2	2.1
Q681	2.1	3.1	1.5
Q682	0	1.0	0

Main 1/4 Schematic Diagram

"●" = SMD

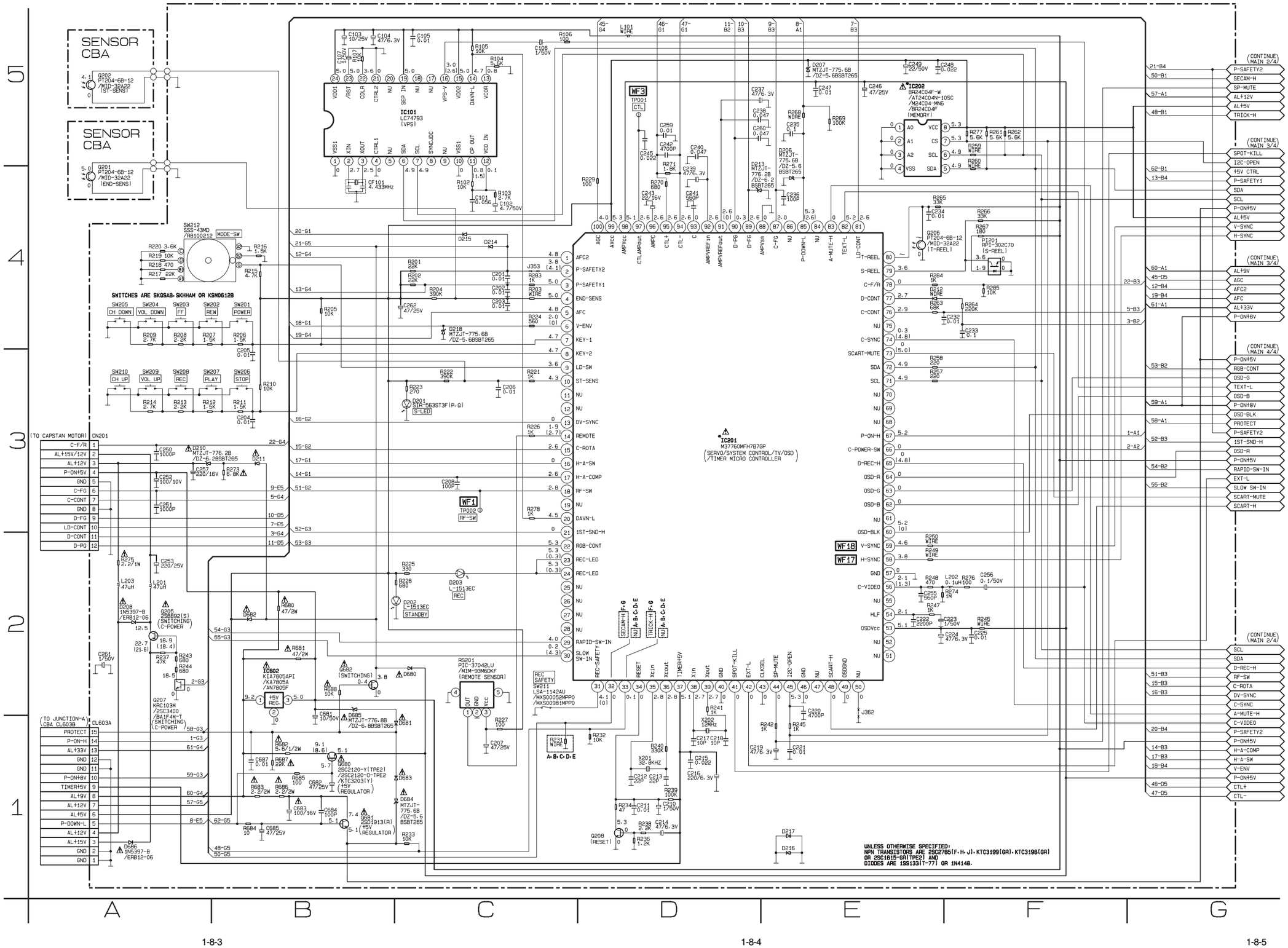
MODE: SP/REC — 1 (5.0) 2 3 (5.0) (2.5) — PLAY MODE / REC MODE

THE SAME VOLTAGE FOR BOTH PLAY & REC MODES.

INDICATES THAT THE VOLTAGE IS NOT CONSISTENT HERE.

Comparison Chart of Models and Marks

MODEL	MARK
14PV360/07	A
14PV365/07	B
14PV360/01	C
14PV365/01	D
14PV365/58	E
14PV360/39	F
14PV365/39	G


SENSOR CBA
SENSOR CBA
IC101 LC74793 (VPS)
IC201 M37760MFH7B7GP (SERVO/SYSTEM CONTROL/TV/OSD /TIMER MICRO CONTROLLER)
IC602 KIA7805API /KA7805A /AN7805F
IC202 BR24C04F-W /AT24C04N-10SC /M24C04-MN6 /BR24C04F (MEMORY)
SWITCHES ARE SKQSAB, SKHHAM OR KSM0612B
UNLESS OTHERWISE SPECIFIED: NPN TRANSISTORS ARE 2SC2785(F,H,J),KTC3199(GR),KTC3198(GR) OR 2SC1815-GR(TPE2) AND DIODES ARE 1SS133(T-77) OR 1N4148.

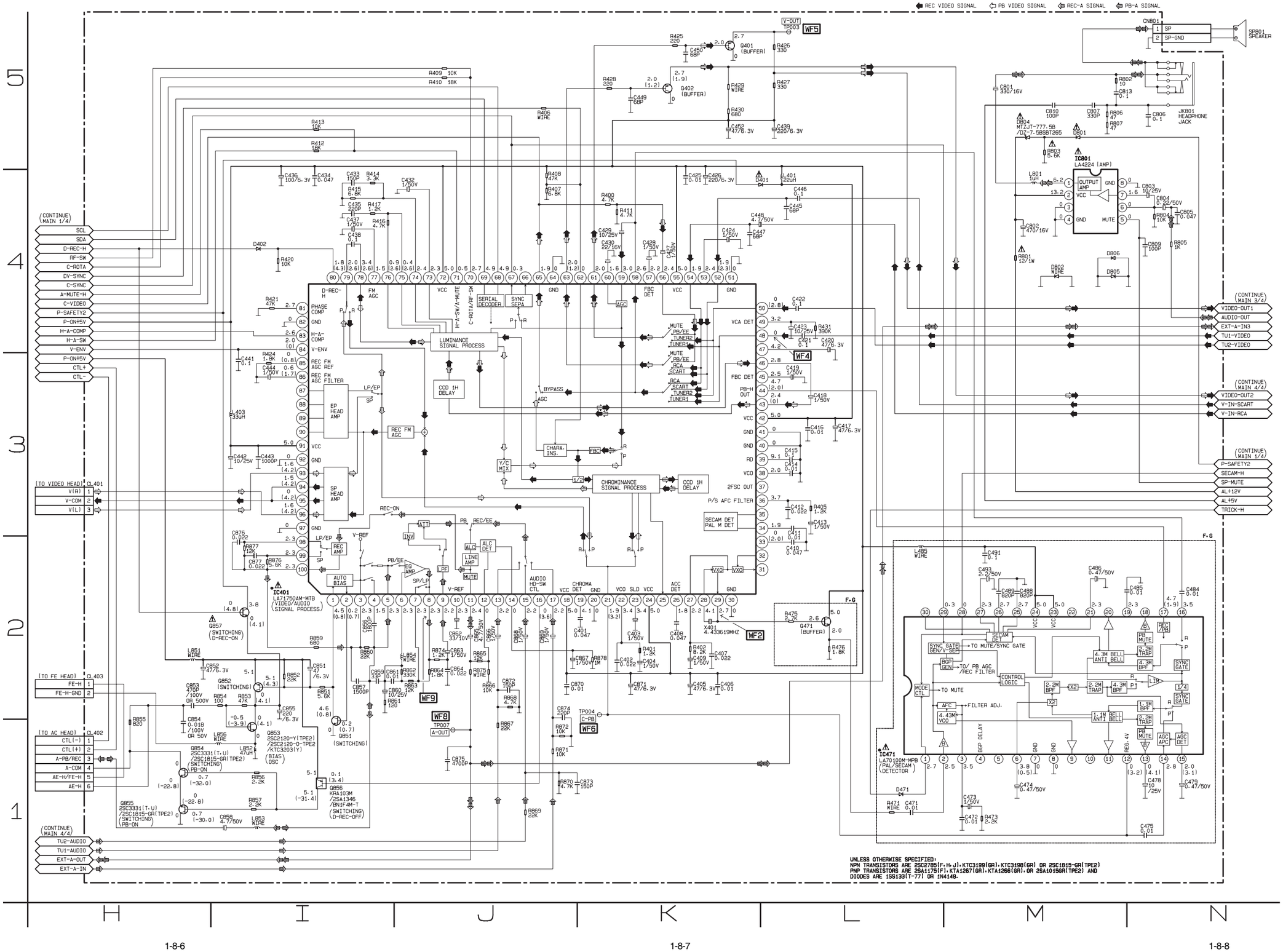
Main 2/4 Schematic Diagram

MODE: SP/REC — 1 (5.0) 2 3 (5.0) (2.5) — PLAY MODE / REC MODE

THE SAME VOLTAGE FOR BOTH PLAY & REC MODES.

INDICATES THAT THE VOLTAGE IS NOT CONSISTENT HERE.

"●" = SMD



UNLESS OTHERWISE SPECIFIED:
NPN TRANSISTORS ARE 2SC2785(F,H,J),KTC3199(GR),KTC3198(GR) OR 2SC1815-GR(TPE2)
PNP TRANSISTORS ARE 2SA1175(F),KTA1267(GR),KTA1266(GR), OR 2SA1015GR(TPE2) AND
DIODES ARE 1SS133(T-77) OR 1N4148.

Comparison Chart of Models and Marks

MODEL	MARK
14PV360/07	A
14PV365/07	B
14PV360/01	C
14PV365/01	D
14PV365/58	E
14PV360/39	F
14PV365/39	G

Main 2/4 Schematic Diagram Parts Location Guide

Ref No.	Position
CAPACITORS	
C401	J-2
C402	K-2
C403	K-2
C404	K-2
C405	K-2
C406	K-2
C407	K-2
C408	K-2
C409	K-2
C410	L-2
C411	L-3
C412	L-3
C413	L-3
C414	L-3
C415	L-3
C416	L-3
C417	L-3
C418	L-3
C419	L-3
C420	L-4
C421	L-4
C422	L-4
C423	L-4
C424	K-4
C425	K-4
C426	K-4
C427	K-4
C428	K-4
C429	K-4
C430	K-4
C432	J-4
C433	I-4
C434	I-4
C435	I-4
C436	I-4
C437	I-4
C438	I-4
C439	I-5
C441	I-3
C442	I-3
C443	I-3
C444	I-3
C445	L-4
C446	L-4
C447	K-4
C448	K-4
C449	K-5
C450	K-5

Ref No.	Position
CAPACITORS	
C452	K-5
C471	L-1
C472	M-1
C473	M-1
C474	M-1
C475	N-1
C478	N-1
C479	N-1
C484	N-2
C485	N-2
C486	M-2
C488	M-2
C489	M-2
C491	M-2
C493	M-2
C801	M-5
C802	M-4
C803	N-4
C804	N-4
C805	N-4
C806	N-5
C807	M-5
C809	N-4
C810	M-5
C813	M-5
C851	I-2
C852	H-2
C853	H-2
C854	H-1
C855	I-2
C856	J-2
C857	I-2
C858	I-1
C859	I-2
C860	I-2
C861	I-2
C862	J-2
C863	J-2
C864	J-2
C865	J-2
C866	J-2
C867	J-2
C868	J-1
C869	J-1
C870	J-2
C871	K-2
C872	J-2
C873	K-1

Ref No.	Position
CAPACITORS	
C874	J-2
C875	J-1
C876	I-3
C877	I-2
CONNECTORS	
CN801	N-5
CL401	H-3
CL402	H-1
CL403	H-2
DIODES	
D401	K-4
D402	I-4
D471	L-1
D801	M-5
D802	M-4
D804	M-5
D805	M-4
D806	M-4
ICS	
IC401	I-2
IC471	L-1
IC801	M-5
COILS	
L401	L-4
L403	I-3
L485	L-2
L801	M-4
L851	H-2
L852	I-1
L853	I-1
L854	J-2
L856	I-1
TRANSISTORS	
Q401	K-5
Q402	K-5
Q471	L-2
Q851	I-1
Q852	I-2
Q853	I-1
Q854	H-1
Q855	H-1
Q856	I-1
Q857	I-2
RESISTORS	
R400	K-4
R401	K-2
R402	K-2
R405	L-3

Ref No.	Position
RESISTORS	
R406	J-5
R407	J-4
R408	J-4
R409	J-5
R410	J-5
R411	K-4
R412	I-5
R413	I-5
R414	I-4
R415	I-4
R416	I-4
R417	I-4
R420	I-4
R421	I-4
R424	I-3
R425	K-5
R426	L-5
R427	L-5
R428	K-5
R429	K-5
R430	K-5
R431	L-4
R471	L-1
R473	M-1
R475	L-2
R476	L-2
R801	M-5
R802	M-5
R803	M-5
R804	N-4
R805	N-4
R806	M-5
R807	M-5
R851	I-2
R852	I-2
R853	I-2
R854	I-2
R855	H-2
R856	I-1
R857	I-1
R859	I-2
R860	I-2
R861	I-2
R862	J-2
R863	J-2
R864	J-2
R865	J-2
R866	J-2

Ref No.	Position
RESISTORS	
R867	J-1
R868	J-2
R869	J-1
R870	J-1
R871	J-1
R872	J-1
R874	J-2
R875	J-2
R876	I-2
R877	I-2
R878	K-2
CRYSTAL OSCILATOR	
X401	K-2
TEST POINTS	
TP003	L-5
TP004	K-2
TP007	J-1
MISCELLANEOUS	
JK801	N-5

Main 3/4 Schematic Diagram Parts Location Guide

Ref No.	Position
CAPACITORS	
C003	S-4
C004	S-4
C005	S-4
C006	S-4
C009	T-4
C010	T-4
C011	T-4
C012	T-4
C013	T-5
C014	U-5
C015	T-4
C016	U-3
C017	T-4
C301	P-2
C302	P-2
C303	P-2
C304	P-2
C305	P-2
C306	P-2
C307	P-2
C313	R-2
C314	R-2
C315	R-2
C316	R-3
C317	R-3
C318	R-3
C319	R-3
C320	R-3
C321	R-3
C322	R-3

Ref No.	Position
CAPACITORS	
C323	R-3
C324	R-3
C325	Q-4
C326	Q-4
C327	Q-4
C328	Q-4
C329	P-4
C330	P-4
C331	P-4
C332	P-4
C334	P-3
C335	P-3
C336	P-3
C337	O-3
C339	Q-2
C340	P-4
C343	Q-4
C344	O-3
C345	R-2
C346	P-1
C347	P-1
C777	U-3
C778	P-5
CONNECTORS	
CN303	O-5
CN701	U-1
CN702	U-1?
CN751	U-3
CL301A	U-2
CL302A	O-5

Ref No.	Position
DIODES	
D301	Q-2
D304	R-2
D305	R-2
D306	R-2
D307	R-2
D309	R-3
D312	R-4
IC	
IC301	P-2
COILS	
L001	T-5
L002	T-4
L003	U-4
L301	P-2
L302	R-3
L303	R-3
L304	P-4
RESISTORS	
R002	S-4
R302	P-2
R303	P-2
R304	P-2
R305	P-1
R306	Q-1
R307	Q-2
R309	Q-2
R310	Q-2
R311	Q-2
R312	Q-2
R313	Q-2

Ref No.	Position
RESISTORS	
R314	Q-2
R315	R-2
R316	R-3
R318	R-3
R319	R-3
R320	R-3
R321	R-4
R322	R-4
R323	Q-4
R325	Q-4
R327	Q-4
R328	Q-4
R329	P-3
R334	O-3
R335	P-3
R336	O-3
R337	P-3
R338	R-3
R352	P-4
R353	P-3
R391	O-4
R392	O-4
R393	O-4
CRYSTAL OSCILATOR	
X301	R-3
MISCELLANEOUS	
TU001	U-5
TU002	F-5
TEST POINTS	
TP006	T-5

Main 3/4 Schematic Diagram

"●" = SMD

MODE: SP/REC — PLAY MODE / REC MODE

THE SAME VOLTAGE FOR BOTH PLAY & REC MODES.

INDICATES THAT THE VOLTAGE IS NOT CONSISTENT HERE.

REC VIDEO SIGNAL | PB VIDEO SIGNAL | REC-A SIGNAL | PB-A SIGNAL

(TO JUNCTION-B) CBA CL302B — CL302A
P-SAFETY1 1
AFC 2
H-DRIVE 3
V-RAMP-NF 4
GND 5
ACL 6
V-DRIVE 7

(NO CONNECTION) CN303
INT-MONITOR 1
I2C-OPEN 2
GND 3
SDA 4
SCL 5
(CN303 is used for adjustment at factory.)

(CONTINUE) MAIN 1/4
SPOT-KILL
I2C-OPEN
+5V CTRL
P-SAFETY1
SDA
SCL
P-ON+5V
AL+5V
V-SYNC
H-SYNC

(CONTINUE) MAIN 2/4
VIDEO-OUT1
AUDIO-OUT
EXT-A-IN3
TU1-VIDEO
TU2-VIDEO

IC301 M61209FP-A609 (VIDEO/CHROMA /DEFLECTION/IF /AUDIO)

TU002 UTUN5LAL002 (TUNER UNIT2)
TU001 UTUN5LAL002 (TUNER UNIT1)
ANT-IN
B+(BST)
RF AGC
AS
+B(5V)
+33V
SDA
SCL
AUDIO OUT
AFT
VIDEO OUT

(TO TEXT CBA) CN901 — CN751
AL+5V
SYNC
SCL
SDA
AL+9V
GND
Y-SW-OUT
GND

(CONTINUE) MAIN 1/4
AL+9V
AGC
AFC2
AFC
AL+33V
P-ON+8V

(CONTINUE) MAIN 4/4
EXT-A-IN
TU1-AUDIO
TU2-AUDIO
OSD-BLK
OSD-B
OSD-G
OSD-BLK
OSD-R

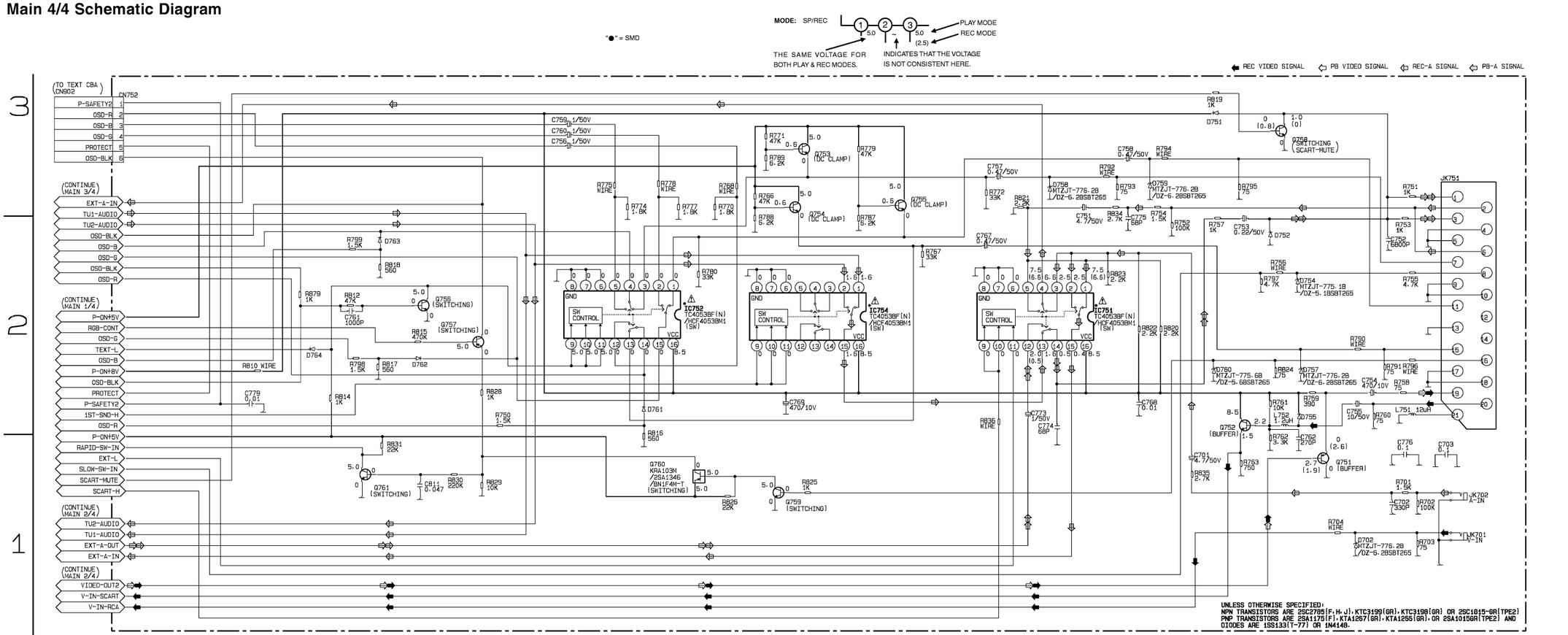
(TO JUNCTION-C) CBA CL301B — CL301A
GND
BLUE
GREEN
RED

(TO JUNCTION-D) CBA CN505 — CN701
GND
GND
GND
GND

(TO JUNCTION-E) CBA CN506 — CN702
GND
GND
GND
GND

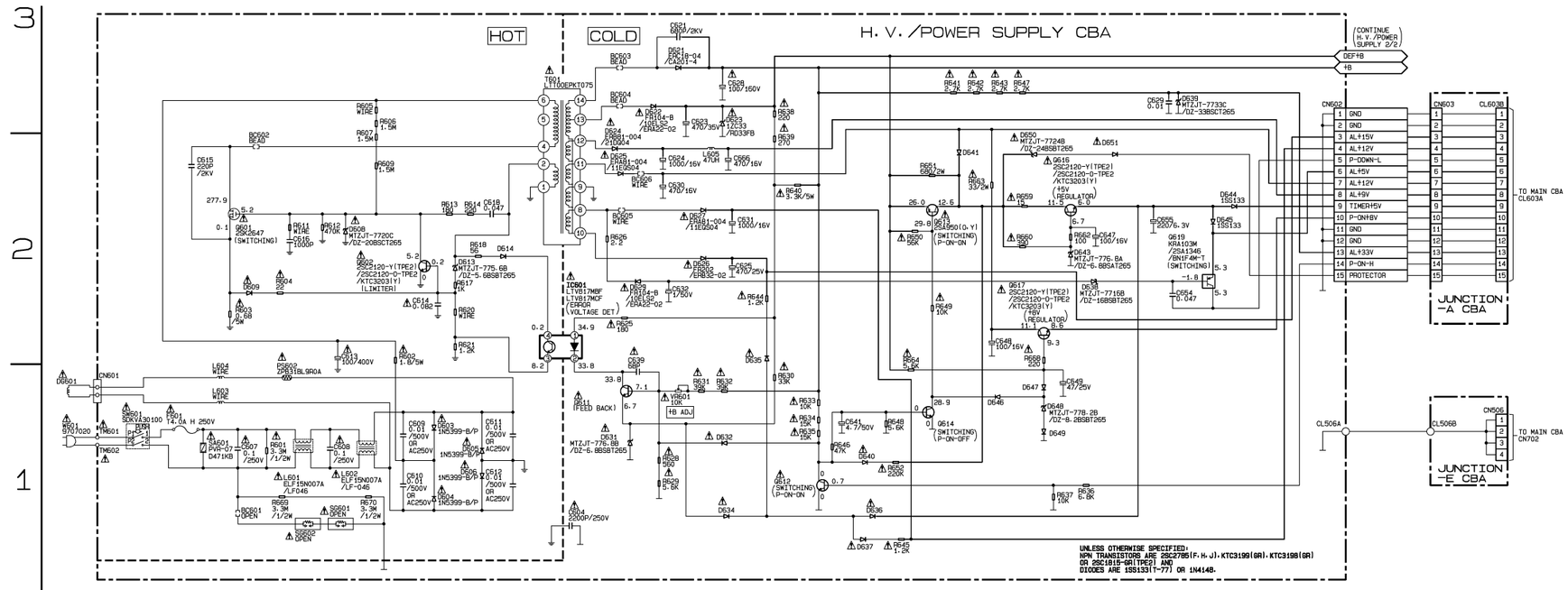
UNLESS OTHERWISE SPECIFIED: DIODES ARE 1SS133(T-77) OR 1N414B.

Main 4/4 Schematic Diagram



T6300SCM4

H.V./Power Supply 1/2 Schematic Diagram



T6300SCP1

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

VOLTAGE CHART (Power off mode)

Ref. No.	1	2	3	4
IC601	13.3	12.2	0.1	0.8
Ref. No.	S	D		G
Q601	0	279.2		2.8
Ref. No.	E	C		B
Q602	0	2.8		0
Q611	6.7	12.2		7.0
Q612	0	7.6		0
Q613	9.4	9.3		8.6
Q614	0	0		0.7
Q616	5.9	8.0		6.6
Q617	3.7	5.4		1.4
Q619	5.1	5.1		-1.6

Main 4/4 & H.V./Power Supply 1/2 Schematic Diagram Parts Location Guide

MAIN 4/4 SCHEMATIC DIAGRAM PARTS LOCATION GUIDE

Ref No.	Position
CAPACITORS	
C701	AA-1
C702	BB-1
C703	BB-1
C751	Z-3
C752	BB-2
C753	AA-2
C754	BB-2
C755	BB-2
C756	X-3
C757	Z-3
C758	Z-3
C759	X-3
C760	X-3
C761	W-2
C762	AA-1
C767	Z-2
C768	AA-2
C769	Y-2
C773	Z-2
C774	Z-2
C775	AA-2
C776	BB-1
C779	V-2
C811	W-1
CONNECTOR	
CN752	V-3

Ref No.	Position
DIODES	
D702	BB-1
D751	AA-3
D752	AA-2
D754	AA-2
D755	AA-2
D757	AA-2
D758	Z-3
D759	AA-3
D760	AA-2
D761	X-2
D762	W-2
D763	W-2
D764	W-2
ICS	
IC751	Z-2
IC752	X-2
IC754	Y-2
COILS	
L751	BB-2
L752	AA-2
TRANSISTORS	
Q751	AA-1
Q752	AA-2
Q753	Y-3
Q754	Y-3
Q755	Z-3

Ref No.	Position
TRANSISTORS	
Q756	W-2
Q757	W-2
Q758	AA-3
Q759	Y-1
Q760	X-1
Q761	W-1
RESISTORS	
R701	BB-1
R702	BB-1
R703	BB-1
R704	AA-1
R750	X-2
R751	BB-3
R752	AA-2
R753	BB-2
R754	AA-3
R755	BB-2
R756	AA-2
R757	AA-2
R758	BB-2
R759	AA-2
R760	BB-2
R761	AA-2
R762	AA-1
R763	AA-1
R766	Y-3

Ref No.	Position
RESISTORS	
R767	Z-2
R768	Y-3
R770	Y-3
R771	Y-3
R772	Z-3
R774	X-3
R775	X-3
R777	X-3
R778	X-3
R779	Y-3
R780	Y-2
R787	Y-3
R788	Y-3
R789	Y-3
R790	BB-2
R791	BB-2
R792	Z-3
R793	Z-3
R794	AA-3
R795	AA-3
R796	BB-2
R797	AA-2
R798	W-2
R799	W-2
R810	V-2
R812	W-2

Ref No.	Position
RESISTORS	
R814	W-2
R815	W-2
R816	X-2
R817	W-2
R818	W-2
R819	AA-3
R820	AA-2
R821	Z-3
R822	AA-2
R823	Z-2
R824	AA-2
R825	Y-1
R826	Y-1
R828	X-2
R829	X-1
R830	W-1
R831	W-1
R834	Z-3
R835	AA-1
R836	Z-2
R879	W-2
MISCELLANEOUS	
JK701	BB-1
JK702	BB-1
JK751	BB-3

H.V./POWER SUPPLY 1/2 SCHEMATIC DIAGRAM PARTS LOCATION GUIDE

Ref No.	Position
CAPACITORS	
C604	C-1
C607	A-1
C608	B-1
C609	B-1
C610	B-1
C611	B-1
C612	B-1
C613	B-2
C614	B-2
C615	A-2
C616	B-2
C618	B-2
C621	C-3
C623	C-3
C624	C-2
C625	D-2
C628	C-3
C629	E-3
C630	C-2
C631	D-2
C632	C-2
C639	C-2
C641	D-1
C647	E-2
C648	E-2
C649	E-1
C654	E-2
C655	E-2
C666	D-2
CONNECTORS	
CN602	F-3
CN601	A-1

Ref No.	Position
CONNECTORS	
CL506A	F-1
CL506A	F-1
DIODES	
D603	B-1
D604	B-1
D605	B-1
D606	B-1
D608	B-2
D609	A-2
D613	B-2
D614	B-2
D621	C-3
D622	C-3
D623	C-3
D624	C-3
D625	C-2
D626	C-2
D627	C-2
D629	C-2
D631	C-1
D632	C-1
D634	C-1
D635	D-2
D636	D-1
D637	D-1
D638	E-2
D639	E-3
D640	D-1
D641	D-2
D643	E-2
D644	F-2
D645	F-2

Ref No.	Position
DIODES	
D646	E-1
D647	E-1
D648	E-1
D649	E-1
D650	E-2
D651	E-2
IC	
IC601	C-2
COILS	
L601	B-1
L602	B-1
L603	A-1
L604	A-1
L605	C-2
TRANSISTORS	
Q601	A-2
Q602	B-2
Q611	C-1
Q612	D-1
Q613	D-2
Q614	D-1
Q616	E-2
Q617	E-2
Q619	E-2
RESISTORS	
R601	A-1
R602	B-2
R603	A-2
R604	B-2
R605	B-3
R606	B-3
R607	B-3

Ref No.	Position
TRANSISTORS	
R609	B-2
R611	B-2
R612	B-2
R613	B-2
R614	B-2
R617	B-2
R618	B-2
R620	B-2
R621	B-2
R625	C-2
R626	C-2
R628	C-1
R629	C-1
R630	D-1
R631	C-1
R632	C-1
R633	D-1
R634	D-1
R635	D-1
R636	E-1
R637	E-1
R638	D-3
R639	D-2
R640	D-2
R641	D-3
R642	E-3
R643	E-3
R644	D-2
R645	D-1
R646	D-1
R647	E-3
R648	D-1

Ref No.	Position
RESISTORS	
R649	D-2
R650	D-2
R651	D-2
R652	D-1
R659	E-2
R660	E-2
R662	E-2
R663	E-2
R664	D-2
R668	E-2
R669	B-1
R670	B-1
SWITCH	
SW601	A-1
MISCELLANEOUS	
BC602	A-2
BC603	C-3
BC604	C-3
BC605	C-2
BC606	C-2
F601	A-1
PS602	B-1
SA601	A-1
T601	C-3
TM601	A-1
TM602	A-1
VARIABLE RESISTOR	
VR601	C-1

H.V./Power Supply 2/2 Schematic Diagram Parts Location Guide

Ref No.	Position
CAPACITORS	
C552	H-2
C553	H-1
C555	H-2
C556	I-1
C558	H-2
C559	H-2
C562	I-1
C571	I-2
C572	I-2
C574	J-1
C577	J-2
C578	J-2
C580	J-2
C581	J-2
C584	K-2
CAPACITORS	
C591	J-1
C592	J-1
CONNECTORS	
CN503	K-1
CN571	I-2
CL501A	K-2
DIODES	
D552	H-2

Ref No.	Position
DIODES	
D571	I-2
D572	J-2
D573	J-1
D584	K-2
D585	K-2
D591	J-1
D593	J-1
D595	I-2
D596	I-2
D597	I-1
D598	J-1
IC	
IC551	H-1
COILS	
L505	I-1
L572	J-2
TRANSISTORS	
Q571	J-2
Q572	I-2
Q591	I-1
RESISTORS	
R551	H-1
R552	I-1
R556	H-2

Ref No.	Position
RESISTORS	
R557	H-1
R558	H-1
R559	H-1
R560	H-1
R561	H-1
R562	H-1
R563	I-1
R565	I-2
R566	I-2
R567	I-1
R570	I-2
R573	I-2
R574	I-2
R575	I-2
R576	I-2
R577	J-2
R578	J-2
R579	I-2
R581	J-2
R583	J-1
R584	K-2
R585	K-2
R586	K-1
R587	J-1

Ref No.	Position
RESISTORS	
R588	J-1
R590	J-2
R591	J-1
R592	J-1
R593	J-1
R594	J-1
R595	I-1
R596	K-2
R597	I-1
R598	J-1
R599	J-1
MISCELLANEOUS	
BC571	J-2
T571	K-2
T572	J-2
TEST POINTS	
TP501	J-1
TP502	J-1
TP503	I-1
TP504	I-1

H.V./Power Supply 2/2 Schematic Diagram

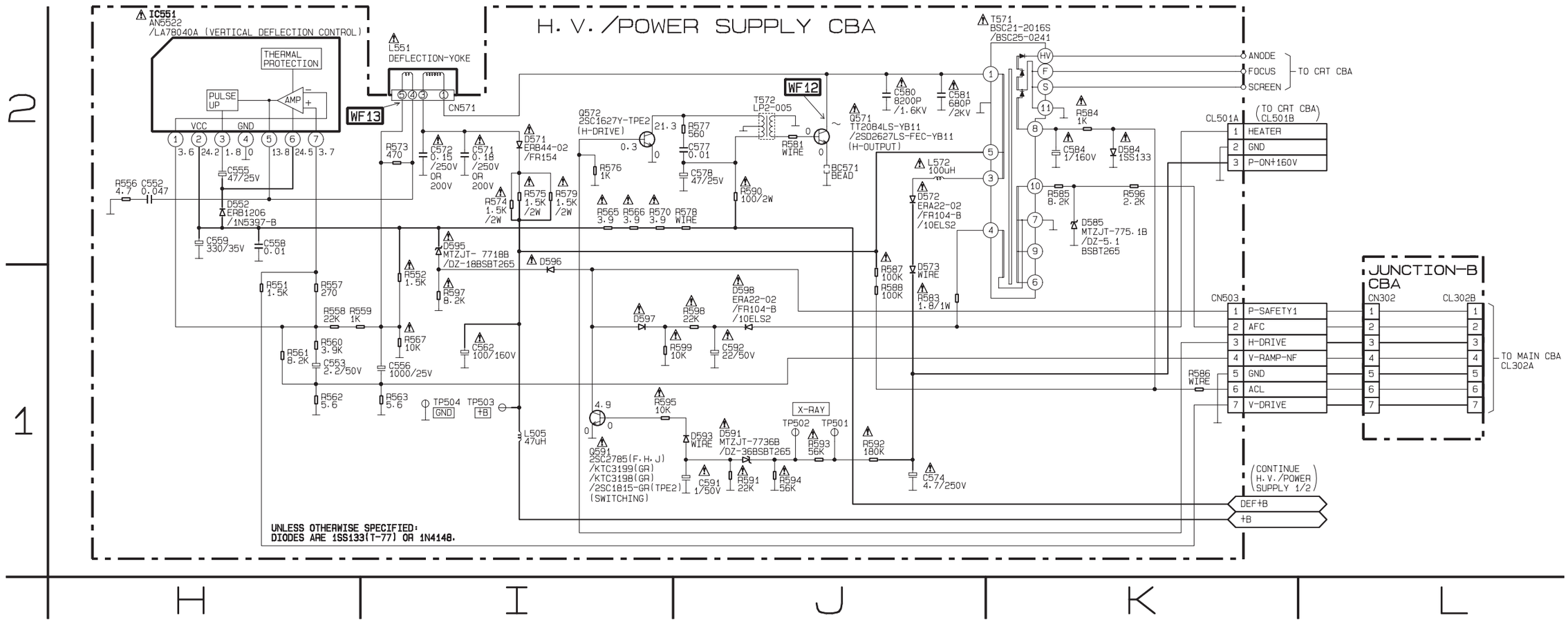
"●" = SMD

MODE: SP/REC

PLAY MODE
REC MODE

THE SAME VOLTAGE FOR BOTH PLAY & REC MODES.

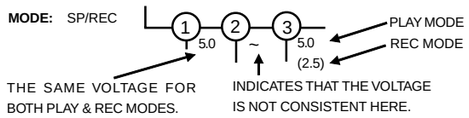
INDICATES THAT THE VOLTAGE IS NOT CONSISTENT HERE.

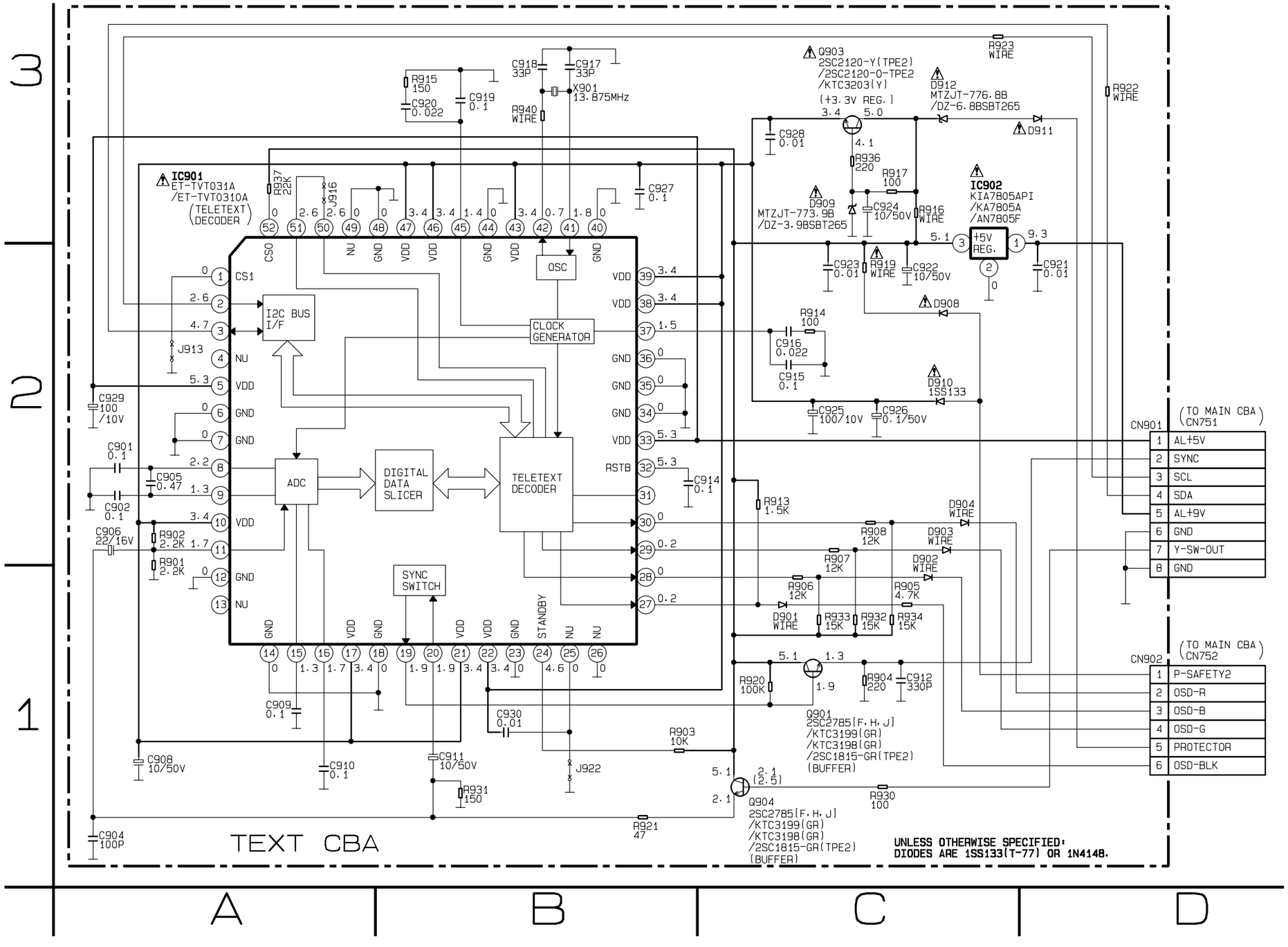


Text Schematic Diagram

"●" = SMD

MODE: SP/REC

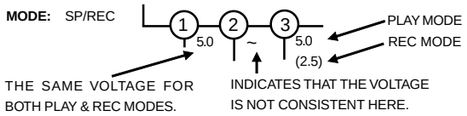


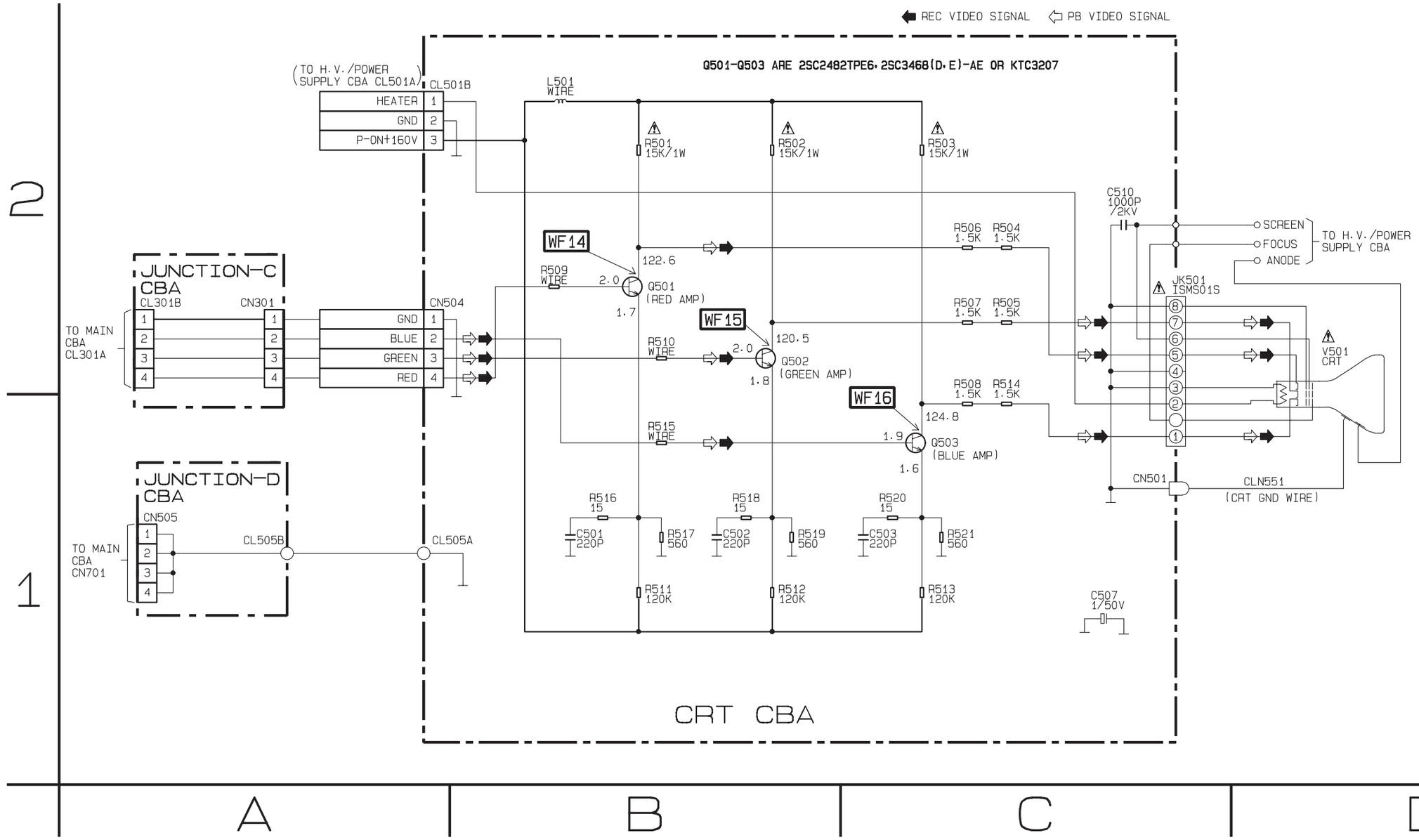


TEXT SCHEMATIC DIAGRAM PARTS LOCATION GUIDE

Ref No.	Position	Ref No.	Position
CAPACITORS		DIODES	
C901	A-2	D911	D-3
C902	A-2	D912	C-3
C904	A-1	ICS	
C905	A-2	IC901	A-3
C906	A-2	IC902	C-3
C908	A-1	TRANSISTORS	
C909	A-1	Q901	C-1
C910	A-1	Q903	C-3
C911	B-1	Q904	C-1
C912	C-1	RESISTORS	
C914	B-2	R901	A-2
C915	C-2	R902	A-2
C916	C-2	R903	B-1
C917	B-3	R904	C-1
C918	B-3	R905	C-1
C919	B-3	R906	C-1
C920	B-3	R907	C-2
C921	D-2	R908	C-2
C922	C-2	R913	C-2
C923	C-2	R914	C-2
C924	C-3	R915	B-3
C925	C-2	R916	C-3
C926	C-2	R917	C-3
C927	B-1	R919	C-2
C928	C-3	R920	C-1
C929	A-2	R921	B-1
C930	B-1	R922	D-3
CONNECTORS		R923	C-3
CN901	D-2	R930	C-1
CN902	D-1	R931	B-1
DIODES		R932	C-1
D901	C-1	R933	C-1
D902	C-2	R934	C-1
D903	C-2	R936	C-3
D904	C-2	R937	A-3
D908	C-2	R940	B-3
D909	C-3	CRYSTAL OSCILLATOR	
D910	C-2	X901	B-3

CRT Schematic Diagram





CRT SCHEMATIC DIAGRAM
PARTS LOCATION GUIDE

Ref No.	Position
CAPACITORS	
C501	B-1
C502	B-1
C503	C-1
C507	C-1
C510	C-2
CONNECTORS	
CN501	C-1
CN504	A-2
CL501B	A-2
CL505A	A-1
COIL	
L501	A-1
TRANSISTORS	
Q501	B-2
Q502	B-2
Q503	C-1
RESISTORS	
R501	B-2
R502	B-2
R503	C-2
R504	C-2
R505	C-2
R506	C-2
R507	C-2
R508	C-2
R509	B-2
R510	B-2
R511	B-1
R512	B-1
R513	C-1
R514	C-2
R515	B-1
R516	B-1
R517	B-1
R518	B-1
R519	B-1
R520	C-1
R521	C-1
MISCELLANEOUS	
JK501	C-2

Main CBA Parts Location Guide

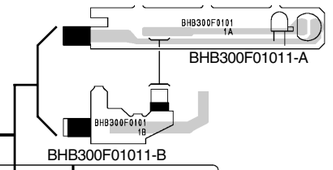
Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		CAPACITORS		CAPACITORS		CAPACITORS		CAPACITORS		DIODES		TRANSISTORS		RESISTORS		RESISTORS		RESISTORS		RESISTORS	
C003	F-4	C249	A-3	C411	D-3	C702	B-5	C876	D-4	D763	G-3	Q756	E-2	R242	C-3	R337	E-2	R760	G-1	R853	E-4
C004	F-4	C250	D-1	C412	C-3	C703	B-5	C877	E-4	D764	C-2	Q757	F-2	R243	E-1	R338	G-4	R761	G-2	R854	E-4
C005	F-4	C251	D-1	C413	D-3	C751	G-3	CONNECTORS		D801	B-1	Q758	G-4	R244	E-1	R352	F-2	R762	G-1	R855	E-3
C006	F-5	C252	D-1	C414	C-3	C752	G-3	CN201	D-1	D802	B-1	Q759	G-2	R245	B-3	R353	E-2	R763	G-1	R856	E-3
C009	G-5	C253	D-1	C415	C-3	C753	G-3	CN303	G-4	D804	B-1	Q760	G-2	R246	C-3	R391	G-4	R766	G-2	R857	E-3
C010	G-5	C255	C-3	C416	C-3	C754	G-2	CN801	C-5	D805	B-5	Q761	D-1	R247	B-3	R392	G-4	R767	G-2	R859	D-4
C011	F-5	C256	C-3	C417	C-3	C755	G-1	CN701	G-5	D806	B-5	Q851	E-4	R248	C-3	R393	G-4	R768	G-2	R860	E-4
C012	F-5	C257	D-1	C418	C-3	C756	G-2	CN702	F-4	ICS		Q852	E-4	R249	C-2	R400	C-4	R770	G-2	R861	D-3
C013	G-4	C259	A-2	C419	C-3	C757	G-3	CN751	F-2	IC101	D-1	Q853	E-4	R250	B-2	R401	D-3	R771	G-2	R862	E-3
C014	G-4	C260	B-2	C420	C-3	C758	G-3	CN752	G-2	IC201	B-3	Q854	E-3	R257	B-2	R402	D-3	R772	G-2	R863	E-3
C015	F-4	C261	D-1	C421	C-4	C759	G-2	CL301A	G-4	IC202	B-2	Q855	E-3	R258	B-2	R405	C-3	R774	G-2	R864	E-3
C016	D-5	C262	C-5	C422	C-4	C760	G-2	CL302A	G-1	IC301	F-3	Q856	E-3	R259	B-2	R406	B-5	R775	G-2	R865	D-3
C017	G-5	C301	E-3	C423	C-4	C761	E-1	CL401	D-4	IC401	D-4	Q857	E-4	R260	B-2	R407	B-5	R777	G-2	R866	D-3
C101	C-2	C302	E-3	C424	C-4	C762	G-1	CL402	D-3	IC471	F-4	RESISTORS		R261	E-4	R408	B-5	R778	G-2	R867	D-2
C102	C-2	C303	F-3	C425	C-4	C767	G-3	CL403	D-5	IC602	F-1	R002	G-4	R262	F-3	R409	C-5	R779	G-2	R868	D-2
C103	C-1	C304	F-3	C426	C-4	C768	G-4	CL603A	G-1	IC751	G-2	R102	D-2	R263	B-2	R410	C-5	R780	G-2	R869	D-3
C104	D-1	C305	F-3	C427	C-4	C769	G-4	DIODES		IC752	G-3	R103	C-2	R264	B-2	R411	C-4	R787	G-2	R870	D-3
C105	D-1	C306	F-3	C428	C-5	C773	G-4	D201	C-3	IC754	G-3	R104	D-1	R265	C-3	R412	C-5	R788	G-2	R871	D-3
C106	D-1	C307	F-3	C429	C-4	C774	G-4	D202	A-3	IC801	B-1	R105	D-1	R266	C-4	R413	C-5	R789	G-2	R872	D-3
C107	D-1	C313	F-4	C430	C-4	C775	G-3	D203	A-1	COILS		R106	C-1	R267	B-4	R414	C-5	R790	G-3	R874	E-3
C201	B-3	C314	F-3	C432	C-5	C776	G-4	D206	B-2	L001	G-4	R107	D-1	R268	B-2	R415	C-4	R791	G-2	R875	E-3
C202	B-3	C315	F-4	C433	C-5	C777	F-1	D207	B-3	L002	F-5	R201	A-2	R269	B-2	R416	C-4	R792	G-3	R876	E-4
C203	C-5	C316	F-3	C434	C-4	C778	F-2	D208	E-1	L003	F-5	R202	A-2	R270	B-2	R417	C-4	R793	G-3	R877	D-4
C204	B-4	C317	F-3	C435	C-4	C779	F-2	D210	E-1	L101	C-1	R203	B-5	R271	B-2	R420	D-4	R794	G-3	R878	D-3
C205	A-4	C318	F-4	C436	C-4	C801	B-1	D211	E-1	L201	E-1	R204	C-5	R273	E-1	R421	D-4	R795	G-3	R879	E-2
C206	C-1	C319	F-4	C437	D-5	C802	C-1	D212	B-3	L202	B-3	R205	A-4	R274	B-3	R424	D-4	R796	G-2	SWITCHES	
C207	A-3	C320	F-3	C438	D-4	C803	B-1	D213	B-2	L203	E-1	R206	A-4	R275	D-1	R425	C-4	R797	G-3	SW201	A-4
C208	B-4	C321	F-3	C439	B-5	C804	A-1	D214	B-3	L301	E-3	R207	A-2	R276	C-2	R426	B-4	R798	B-2	SW202	A-2
C210	B-4	C322	F-3	C441	D-4	C805	B-1	D215	B-1	L302	F-4	R208	A-4	R277	B-2	R427	B-5	R799	B-2	SW203	A-2
C211	B-4	C323	F-3	C442	D-4	C806	B-1	D216	D-5	L303	F-3	R209	A-4	R278	A-4	R428	C-4	R801	C-1	SW204	A-4
C212	B-4	C324	F-3	C443	D-4	C807	A-1	D217	D-5	L304	F-2	R210	A-4	R283	B-3	R429	B-5	R802	B-1	SW205	A-3
C213	B-4	C325	F-3	C444	D-4	C809	B-1	D218	B-4	L401	C-3	R211	A-2	R284	C-1	R430	B-5	R803	B-1	SW206	A-2
C214	B-4	C326	G-3	C445	C-4	C810	A-1	D301	F-3	L403	D-4	R212	A-2	R285	D-1	R431	C-4	R804	B-1	SW207	A-2
C215	B-4	C327	F-3	C446	C-3	C811	D-1	D304	G-4	L485	D-4	R213	A-3	R302	E-2	R471	D-5	R805	B-1	SW208	A-2
C216	C-4	C328	F-4	C447	C-4	C813	B-1	D305	G-4	L751	G-2	R214	A-4	R303	F-3	R473	D-5	R806	B-1	SW209	A-4
C217	B-4	C329	F-2	C448	B-5	C851	E-4	D306	G-4	L752	G-2	R215	B-2	R304	F-3	R475	D-3	R807	B-1	SW210	A-3
C218	B-4	C330	F-3	C449	C-5	C852	E-3	D307	F-4	L801	B-1	R216	B-1	R305	F-3	R476	D-3	R810	G-1	SW211	B-4
C219	C-3	C331	F-2	C450	C-4	C853	E-4	D309	G-4	L851	E-3	R217	C-1	R306	F-3	R680	G-1	R812	E-1	SW212	B-2
C220	C-3	C332	F-2	C452	B-5	C854	E-4	D312	F-4	L852	E-4	R218	C-1	R307	F-3	R681	G-1	R814	E-2	TEST POINTS	
C221	C-3	C334	F-2	C471	D-5	C855	E-4	D401	C-3	L853	E-3	R219	C-1	R309	F-4	R682	F-1	R815	F-2	TP001	D-5
C222	B-3	C335	F-2	C472	F-5	C856	E-3	D402	D-4	L854	E-4	R220	C-1	R310	F-4	R683	F-1	R816	B-2	TP002	D-5
C223	C-3	C336	F-2	C473	D-5	C857	E-4	D471	D-5	L856	E-4	R221	B-4	R311	F-4	R684	F-1	R817	B-2	TP003	D-5
C224	C-3	C337	F-2	C474	D-4	C858	E-3	D680	E-1	TRANSISTORS		R222	B-1	R312	F-4	R685	F-1	R818	B-2	TP004	D-5
C225	B-3	C339	F-3	C475	F-5	C859	E-3	D681	F-1	Q201	C-5	R223	C-3	R313	F-4	R686	F-1	R819	G-4	TP006	G-5
C232	B-2	C340	F-2	C478	F-4	C860	E-3	D682	C-1	Q202	C-1	R224	B-3	R314	F-4	R687	G-1	R820	G-4	TP007	D-5
C233	B-2	C343	F-2	C479	F-5	C861	E-3	D683	E-1	Q205	E-1	R225	A-2	R315	F-4	R688	G-1	R821	G-4	CRYSTAL OSCILATORS	
C234	C-3	C344	F-2	C484	F-4	C862	D-3	D684	E-1	Q206	C-3	R226	B-4	R316	E-3	R701	A-5	R822	G-4	X201	B-4
C235	B-2	C345	F-4	C485	F-4	C863	D-3	D685	F-1	Q207	E-1	R227	A-3	R318	F-4	R702	A-5	R823	G-4	X202	C-4
C236	B-2	C346	F-4	C486	F-4	C864	D-3	D686	E-1	Q208	B-4	R228	A-1	R319	F-3	R703	A-5	R824	G-2	X301	F-3
C237	B-2	C347	E-4	C488	F-4	C865	D-3	D702	A-5	Q401	C-4	R229	B-3	R320	F-3	R704	A-5	R825	G-2	X401	C-3
C238	B-2	C401	D-3	C489	D-4	C866	D-3	D751	G-3	Q402	C-5	R231	B-4	R321	F-4	R750	B-2	R826	G-2	MISCELLANEOUS	
C239	B-2	C402	D-3	C491	D-4	C867	D-3	D752	G-3	Q471	D-3	R232	B-4	R322	G-3	R751	G-3	R828	F-2	CF101	D-2
C240	B-3	C403	D-3	C493	D-4	C868	D-3	D754	G-3	Q680	F-1	R233	F-5	R323	F-3	R752	G-3	R829	E-2	JK701	A-5
C241	B-3	C404	D-3	C681	F-1	C869	D-3	D755	G-2	Q681	E-1	R234	B-4	R325	F-3	R753	G-3	R830	E-1	JK702	A-5
C242	B-2	C405	D-3	C682	F-2	C870	D-4	D757	G-3	Q682	G-1	R236	B-4	R327	F-3	R754	G-3	R831	D-1	JK751	G-3
C243	A-2	C406	D-3	C683	F-1	C871	D-4	D758	G-3	Q751	G-2	R237	E-1	R328	F-2	R755	G-3	R834	G-3	JK801	A-1
C245	B-3	C407	D-3	C684	E-2	C872	D-2	D759	G-3	Q752	G-1	R238	B-4	R329	F-2	R756	G-3	R835	F-4	PI201	B-4
C246	A-3	C408	D-3	C685	F-1	C873	D-3	D760	G-2	Q753	G-2	R239	B-4	R334	E-2	R757	G-4	R836	G-4	RS201	A-3
C247	A-3	C409	D-3	C687	G-1	C874	D-3	D761	G-3	Q754	G-2	R240	B-4	R335	E-2	R758	G-2	R851	D-4	TU001	G-5
C248	B-3	C410	D-3	C701	G-4	C875	E-3	D762	G-3	Q755	G-2	R241	B-4	R336	E-2	R759	G-2	R852	E-4	TU002	G-5

Main CBA Top View

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

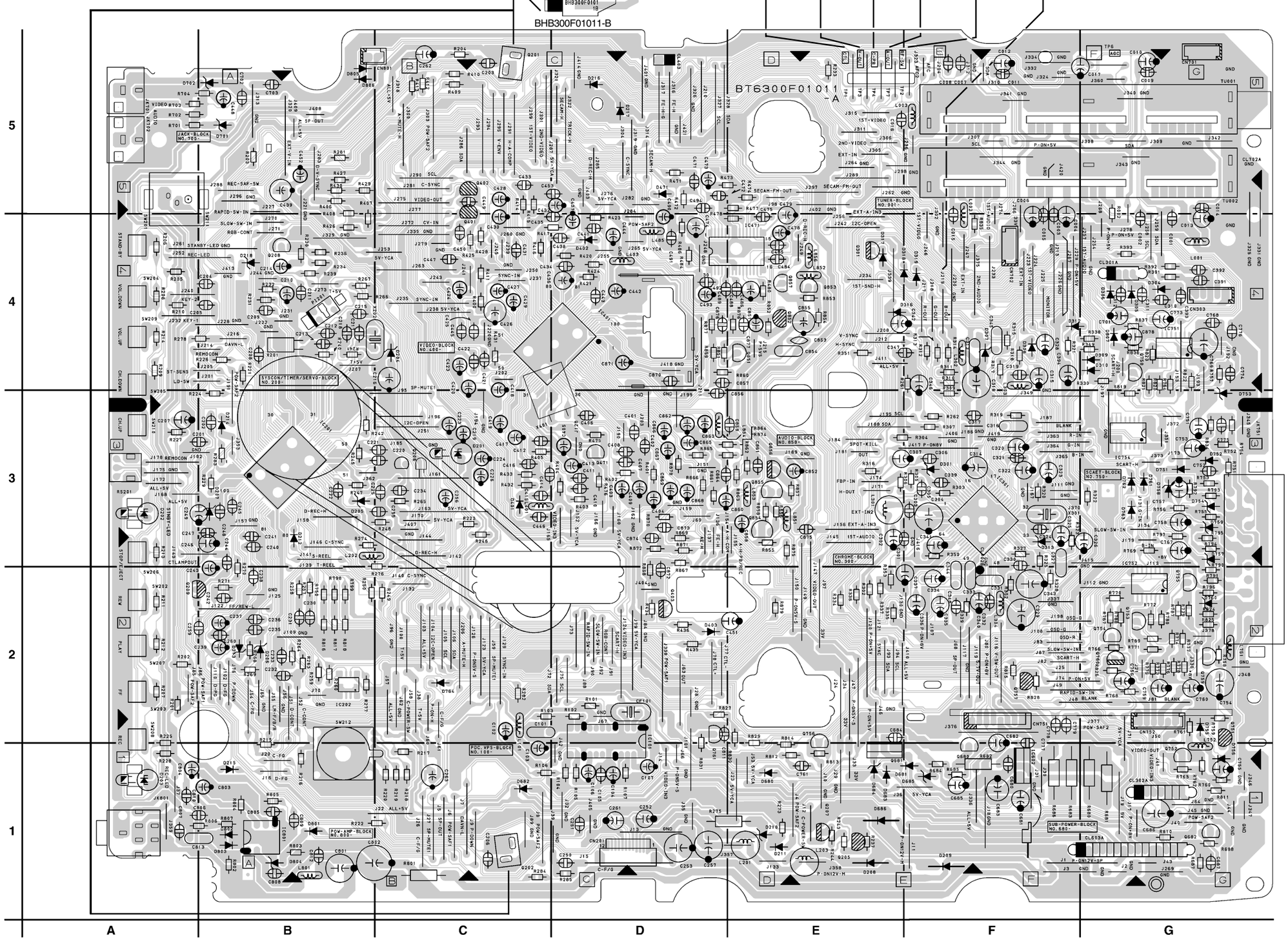
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.

Sensor CBA Top View



BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT , AN ISOLATION TRANSFORMER MUST BE USED. ALSO , IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY , WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT , A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



Main CBA Bottom View

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

WF 2
PIN 29
OF IC401

WF 9
PIN 8
OF IC401

WF 4
PIN 48
OF IC401

PIN 1
OF CN303
INTELLIGENT MONITOR

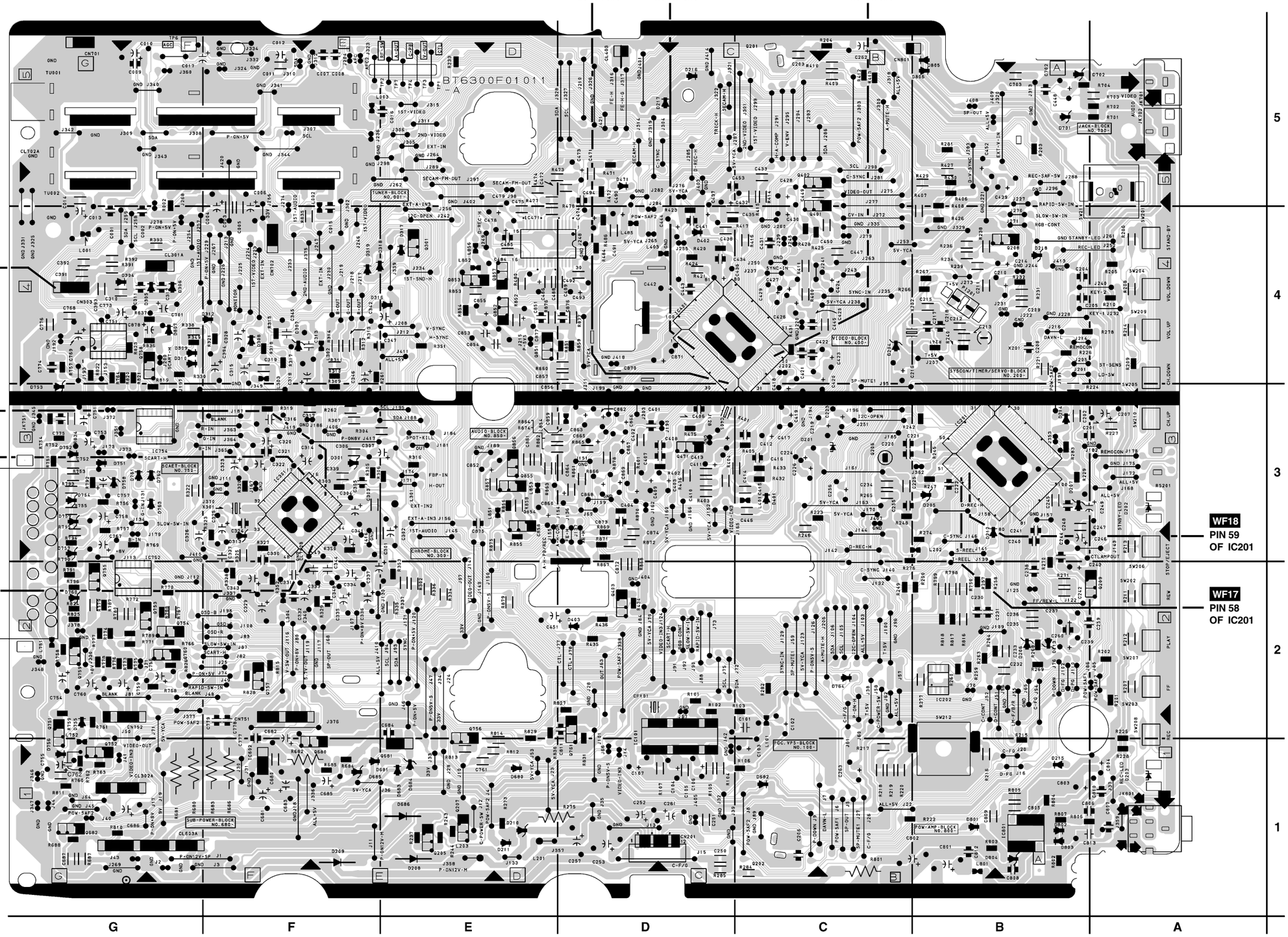
WF11
PIN 7
OF IC301

WF10
PIN 13
OF IC301

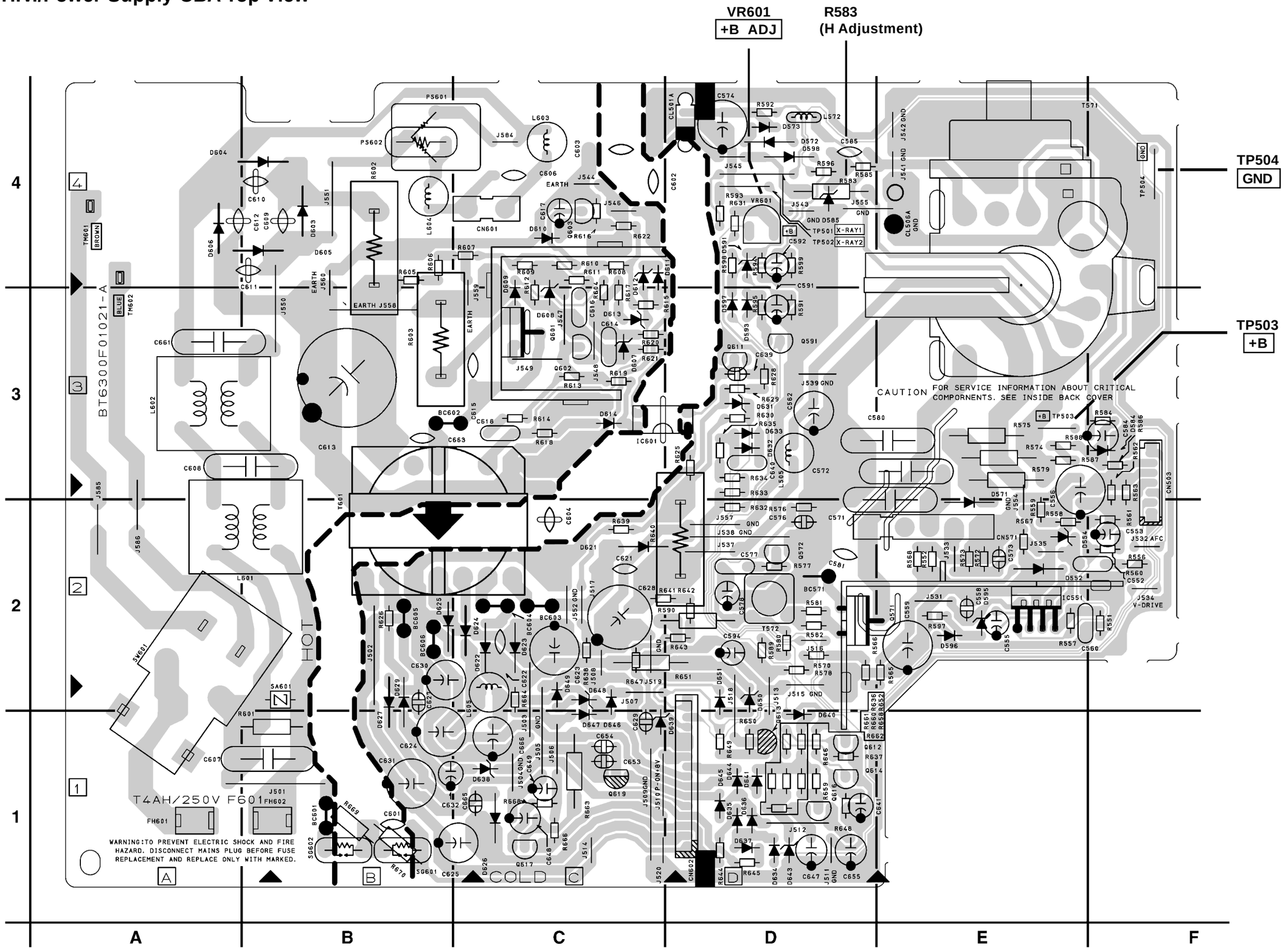
WF 7
PIN 52
OF IC301

WF18
PIN 59
OF IC201

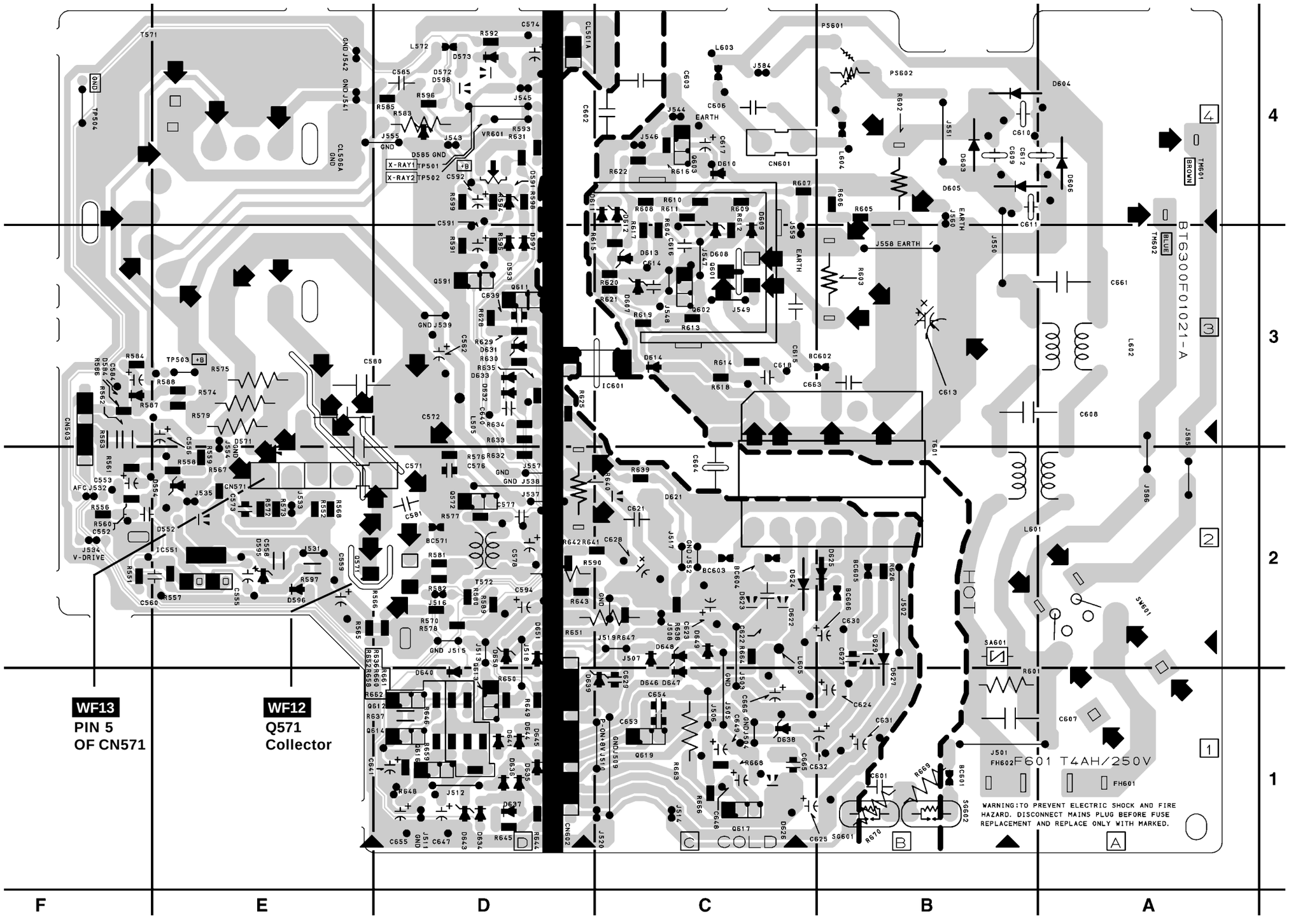
WF17
PIN 58
OF IC201



H.V./Power Supply CBA Top View



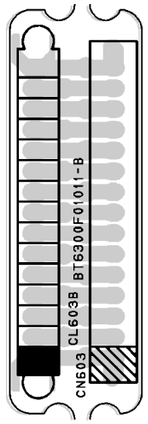
H.V./Power Supply CBA Bottom View



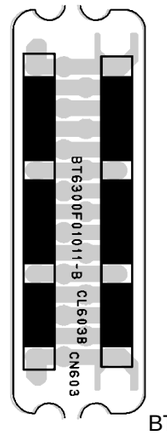
H.V./Power Supply CBA Parts Location Guide

Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		DIODES		TRANSISTORS		RESISTORS	
C552	F-2	D591	D-4	Q613	D-1	R625	D-3
C553	F-2	D593	D-3	Q614	D-1	R626	B-2
C555	E-2	D595	E-2	Q616	D-1	R628	D-3
C556	E-2	D596	E-2	Q617	C-1	R629	D-3
C558	E-2	D597	D-3	Q619	C-1	R630	D-3
C559	E-2	D598	D-4	RESISTORS		R631	D-4
C562	D-3	D603	B-4	R551	F-2	R632	D-2
C571	D-2	D604	A-4	R552	E-2	R633	D-3
C572	D-3	D605	B-4	R556	F-2	R634	D-3
C574	D-4	D606	A-4	R557	E-2	R635	D-3
C577	D-2	D608	C-3	R558	E-2	R636	D-2
C578	D-2	D609	C-3	R559	E-2	R637	D-1
C580	D-3	D613	C-3	R560	F-2	R638	C-2
C581	D-2	D614	C-3	R561	F-2	R639	C-2
C584	F-3	D621	C-2	R562	F-3	R640	C-2
C591	D-4	D622	C-2	R563	F-2	R641	C-2
C592	D-4	D623	C-2	R565	E-2	R642	D-2
C604	C-2	D624	C-2	R566	D-2	R643	D-2
C607	A-1	D625	B-2	R567	E-2	R644	D-1
C608	A-3	D626	C-1	R570	D-2	R645	D-1
C609	B-4	D627	B-1	R573	E-2	R646	D-1
C610	B-4	D629	B-2	R574	E-3	R647	C-2
C611	B-4	D631	D-3	R575	E-3	R648	D-1
C612	B-4	D632	D-3	R576	D-2	R649	D-1
C613	B-3	D634	D-1	R577	D-2	R650	D-1
C614	C-3	D635	D-1	R578	D-2	R651	D-2
C615	B-3	D636	D-1	R579	E-3	R652	E-2
C616	C-3	D637	D-1	R581	D-2	R659	D-1
C618	B-3	D638	C-1	R583	D-4	R660	D-1
C621	C-2	D639	D-1	R584	F-3	R662	D-1
C623	C-2	D640	D-1	R585	D-4	R663	C-1
C624	B-1	D641	D-1	R586	F-3	R664	C-2
C625	B-1	D643	D-1	R587	E-3	R668	C-1
C628	C-2	D644	D-1	R588	E-3	R669	B-1
C629	C-1	D645	D-1	R590	C-2	R670	B-1
C630	B-2	D646	C-1	R591	D-3	SWITCH	
C631	B-1	D647	C-1	R592	D-4	SW601	A-2
C632	B-1	D648	C-2	R593	D-4	TEST POINTS	
C639	D-3	D649	C-2	R594	D-4	TP501	D-4
C641	E-1	D650	D-2	R595	D-3	TP502	D-4
C647	D-1	D651	D-2	R596	D-4	TP503	E-3
C648	C-1	ICS		R597	E-2	TP504	F-4
C649	C-1	IC551	E-2	R598	D-4	VARIABLE RESISTOR	
C654	C-1	IC601	C-3	R599	D-4	VR601	D-4
C655	D-1	COILS		R601	A-1	MISCELLANEOUS	
C666	C-1	L505	D-3	R602	B-4	BC571	D-2
CONNECTORS		L572	D-4	R603	B-3	BC602	B-3
CN503	F-3	L601	A-2	R604	C-3	BC603	C-2
CN571	E-2	L602	A-3	R605	B-4	BC604	C-2
CN602	D-1	L603	C-4	R606	B-4	BC605	B-2
CN601	C-4	L604	B-4	R607	C-4	BC606	B-2
CL501A	D-4	L605	C-1	R609	C-4	F601	A-1
CL506A	E-4	TRANSISTORS		R611	C-4	PS602	B-4
DIODES		Q571	E-2	R612	C-3	SA601	B-2
D552	E-2	Q572	D-2	R613	C-3	T571	E-4
D571	E-3	Q591	D-3	R614	C-3	T572	D-2
D572	D-4	Q601	C-3	R617	C-3	T601	B-3
D573	D-4	Q602	C-3	R618	C-3	TM601	A-4
D584	F-3	Q611	D-3	R620	C-3	TM602	A-3
D585	D-4	Q612	D-1	R621	C-3		

Junction-A CBA Top View

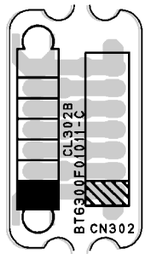


Junction-A CBA Bottom View

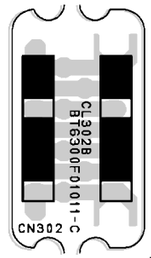


BT6300F01011-B

Junction-B CBA Top View

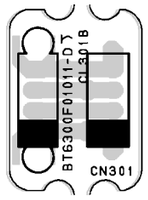


Junction-B CBA Bottom View

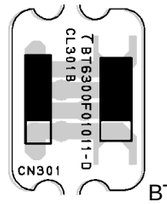


BT6300F01011-C

Junction-C CBA Top View

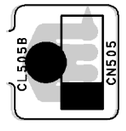


Junction-C CBA Bottom View



BT6300F01011-D

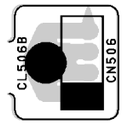
Junction-D CBA Top View



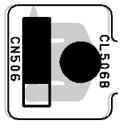
Junction-D CBA Bottom View

BT6300F01021

Junction-E CBA Top View



Junction-E CBA Bottom View

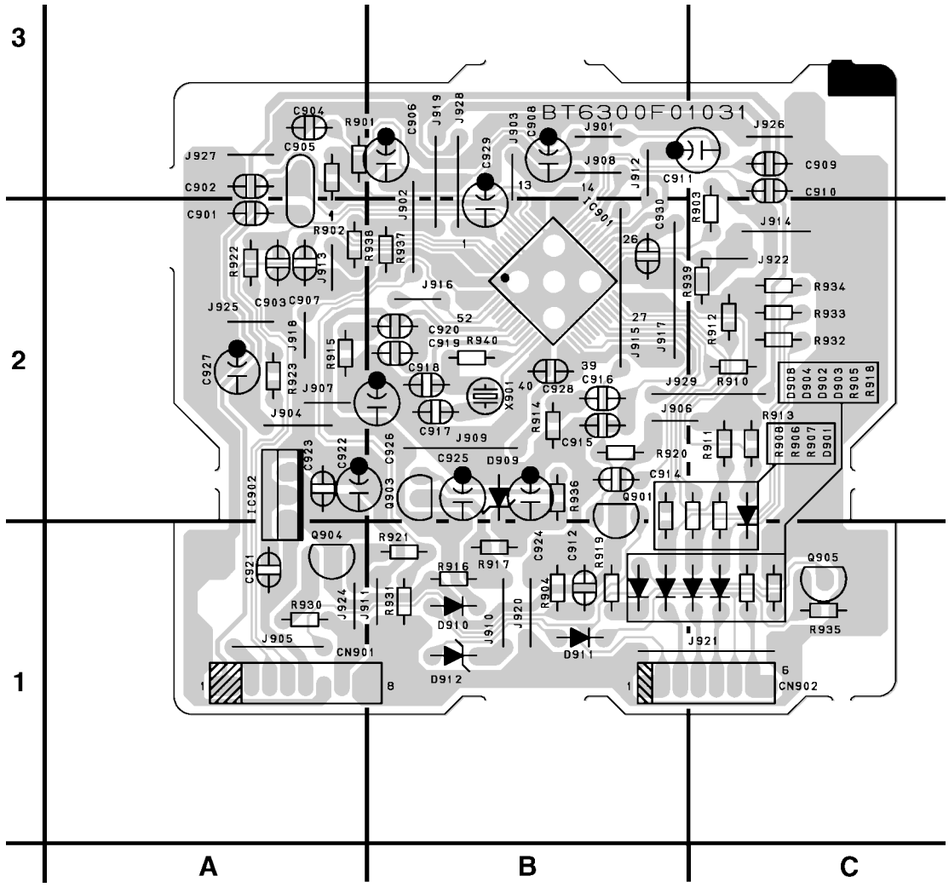


BT6300F01021

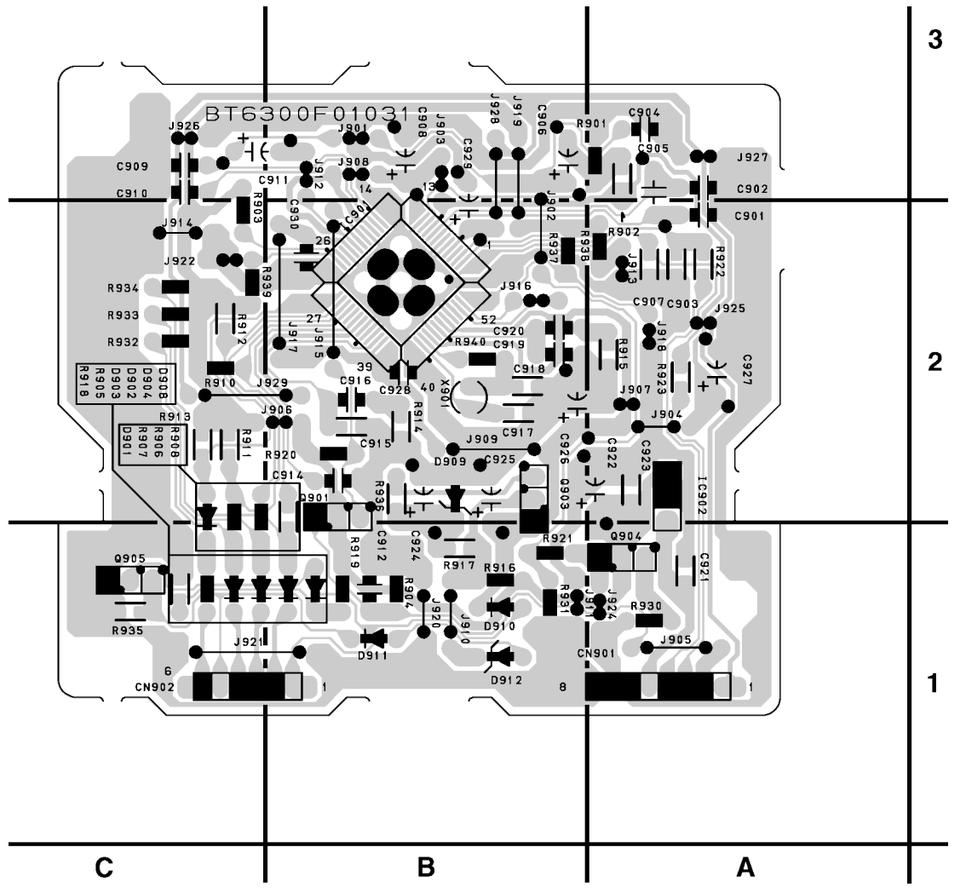
5 4 3 2 1

A B C D

Text CBA Top View



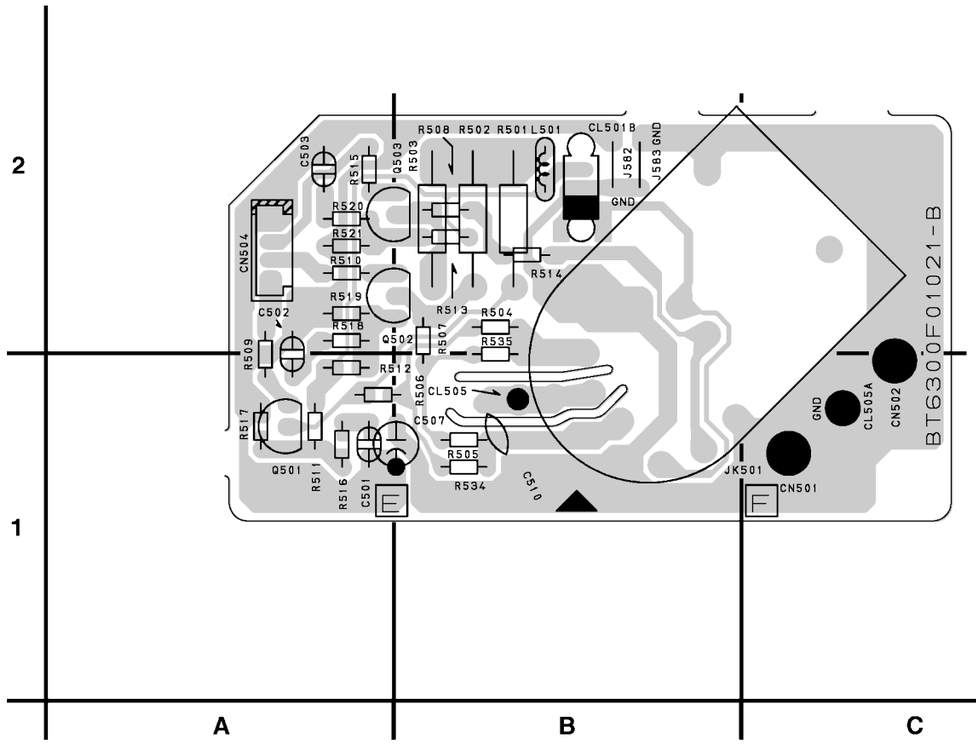
Text CBA Bottom View



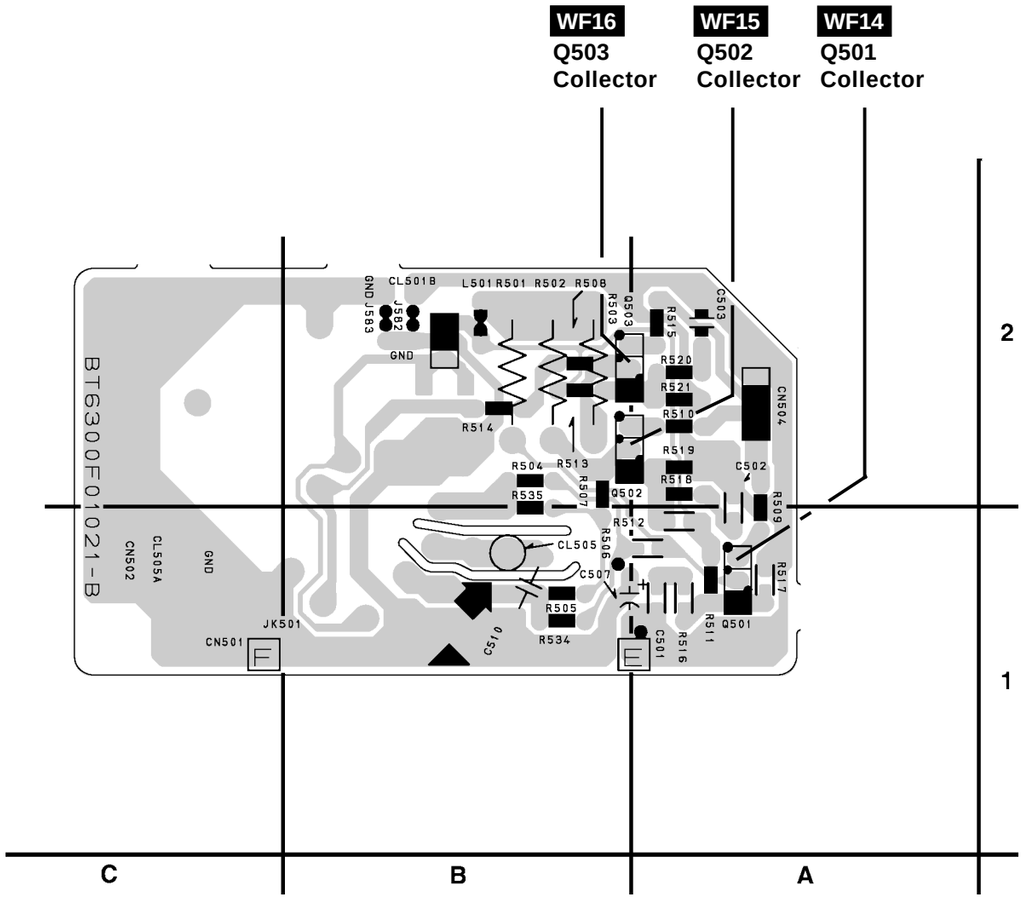
TEXT CBA PARTS LOCATION GUIDE

Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		CAPACITORS		DIODES		RESISTORS	
C901	A-2	C923	A-2	D911	B-1	R914	B-2
C902	A-3	C924	B-1	D912	B-1	R915	A-2
C904	A-3	C925	B-2	ICS		R916	B-1
C905	A-3	C926	B-2	IC901	B-2	R917	B-1
C906	B-3	C927	A-2	IC902	A-2	R919	B-1
C908	B-3	C928	B-2	TRANSISTORS		R920	B-2
C909	C-3	C929	B-3	Q901	B-2	R921	B-1
C910	C-3	C930	B-2	Q903	B-2	R922	A-2
C911	B-3	CONNECTORS		Q904	A-1	R923	A-2
C912	B-1	CN901	A-1	RESISTORS		R930	A-1
C914	B-2	CN902	C-1	R901	A-3	R931	B-1
C915	B-2	DIODES		R902	A-2	R932	C-2
C916	B-2	D901	C-2	R903	C-2	R933	C-2
C917	B-2	D902	C-2	R904	B-1	R934	C-2
C918	B-2	D903	C-2	R905	C-2	R936	B-2
C919	B-2	D904	C-2	R906	C-2	R937	B-2
C920	B-2	D908	C-2	R907	C-2	R940	B-2
C921	A-1	D909	B-2	R908	C-2	CRYSTAL OSCILLATOR	
C922	A-2	D910	B-1	R913	C-2	X901	B-2

CRT CBA Top View



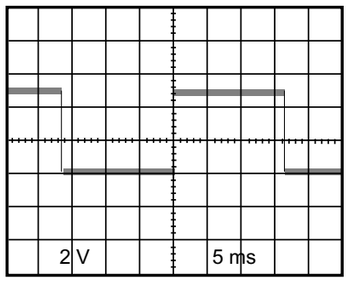
CRT CBA Bottom View



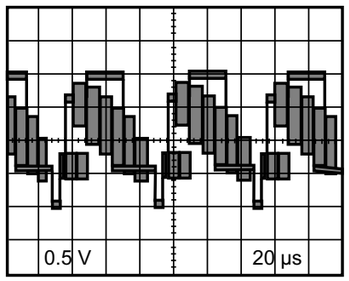
Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		COIL		RESISTORS		RESISTORS	
C501	A-1	L501	B-2	R505	B-1	R515	A-2
C502	A-2	TRANSISTORS		R506	B-1	R516	A-1
C503	A-2	Q501	A-1	R507	B-2	R517	A-1
C507	B-1	Q502	A-2	R508	B-2	R518	A-2
C510	B-1	Q503	B-2	R509	A-1	R519	A-2
CONNECTORS		RESISTORS		R510	A-2	R520	A-2
CN501	C-1	R501	B-2	R511	A-1	R521	A-2
CN504	A-2	R502	B-2	R512	A-1	MISCELLANEOUS	
CL501B	B-2	R503	B-2	R513	B-2	JK501	B-1
CL505A	C-1	R504	B-2	R514	B-2		

WAVEFORMS

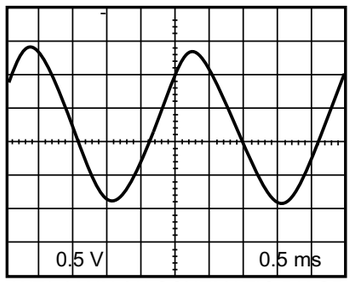
WAVEFORM NOTES
INPUT: NTSC COLOR BAR SIGNAL
OTHER CONTROLS: CENTER POSITION
VOLTAGES SHOWN ARE RANGE OF OSCILLOSCOPE SETTING



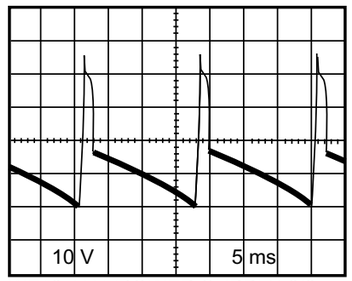
WF1 MAIN 1/4 SCHEMATIC DIAGRAM
TP002 RF-SW



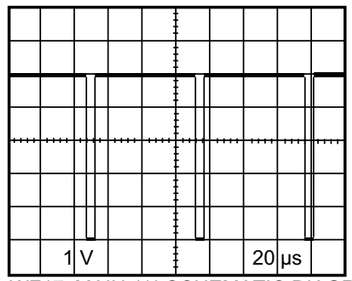
WF5 MAIN 2/4 SCHEMATIC DIAGRAM
TP003 V-OUT



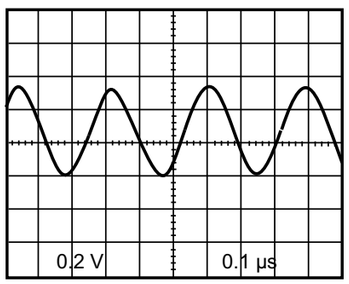
WF9 MAIN 2/4 SCHEMATIC DIAGRAM
IC401 PIN 8



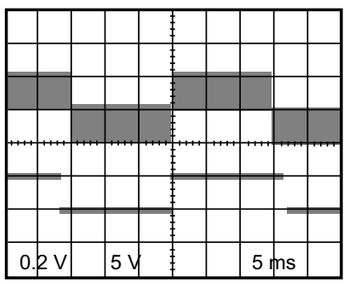
WF13 H.V./POWER SUPPLY 2/2
SCHEMATIC DIAGRAM
CN571 PIN 5



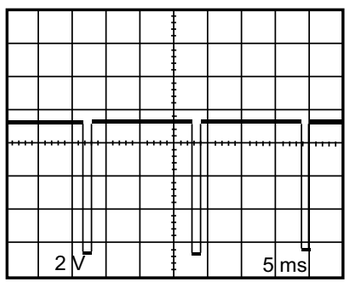
WF17 MAIN 1/4 SCHEMATIC DIAGRAM
IC201 PIN 58



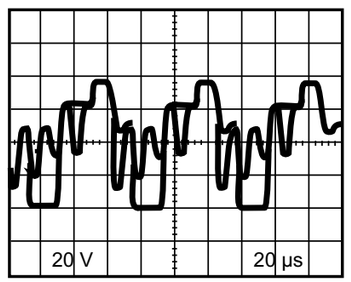
WF2 MAIN 2/4 SCHEMATIC DIAGRAM
IC401 PIN 29



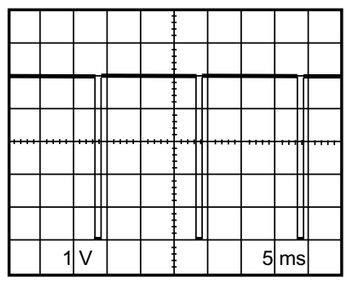
Upper: WF6 Lower: WF1
MAIN 2/4 SCHEMATIC DIAGRAM
TP004 C-PB



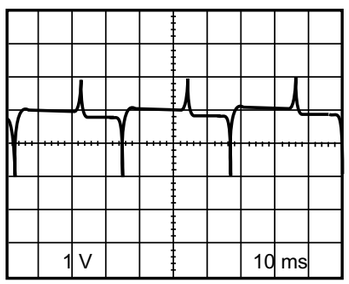
WF10 MAIN 3/4 SCHEMATIC DIAGRAM
IC301 PIN 13



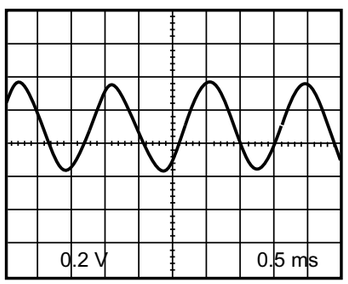
WF14 CRT SCHEMATIC DIAGRAM
Q501 COLLECTOR



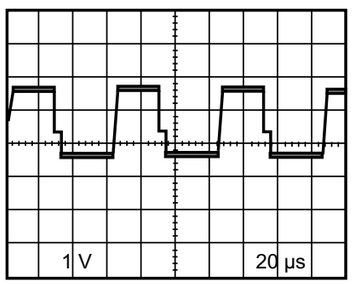
WF18 MAIN 1/4 SCHEMATIC DIAGRAM
IC201 PIN 59



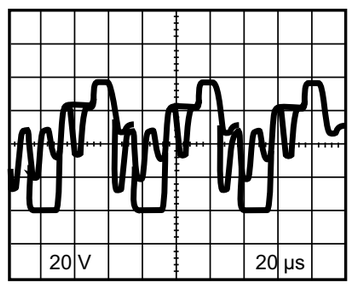
WF3 MAIN 1/4 SCHEMATIC DIAGRAM
TP001 CTL



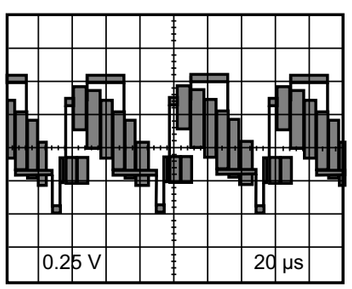
WF7 MAIN 3/4 SCHEMATIC DIAGRAM
IC301 PIN 52



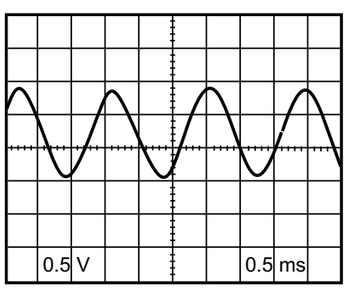
WF11 MAIN 3/4 SCHEMATIC DIAGRAM
IC301 PIN 7



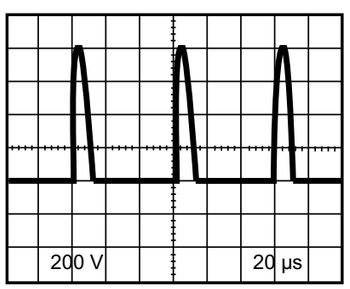
WF15 CRT SCHEMATIC DIAGRAM
Q502 COLLECTOR



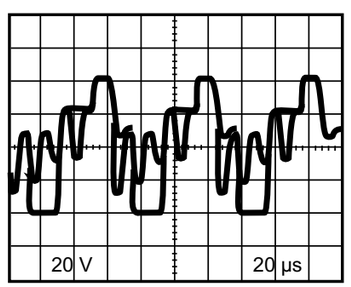
WF4 MAIN 2/4 SCHEMATIC DIAGRAM
IC401 PIN 48



WF8 MAIN 2/4 SCHEMATIC DIAGRAM
TP007 A-OUT



WF12 H.V./POWER SUPPLY 2/2
SCHEMATIC DIAGRAM
Q571 COLLECTOR



WF16 CRT SCHEMATIC DIAGRAM
Q503 COLLECTOR

WIRING DIAGRAM

NOTE FOR WIRE CONNECTORS:
1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

ANODE

CRT

GND

CRT CBA
BT6300F01021-B

FOCUS

SCREEN

CN501

CL501B
1	HEATER
2	GND
3	P-ON+160V

CL501A
1	HEATER
2	GND
3	P-ON+160V

T571
FBT

D.Y.
HD
VD

CN571
1	
2	
3	
4	
5	

H.V. / POWER SUPPLY CBA
BT6300F01021-A

CN601
1	
2	

W601

JK751
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

CL505A — CL505B CN505

JUNCTION-D CBA
BT6300F01021

1	1	GND	CN701 1
2	2	GND	CN701 2
3	3	GND	CN701 3
4	4	GND	CN701 4

CN504 — CN301 CL301B

JUNCTION-C CBA
BT6300F01011-D

GND 1	1	1	GND CL301A 1
BLUE 2	2	2	BLUE CL301A 2
GREEN 3	3	3	GREEN CL301A 3
RED 4	4	4	RED CL301A 4

SENSOR CBA
(END-SENSOR)
BHB300F01011-A,B

SENSOR CBA
(ST-SENSOR)
BHB300F01011-A,B

(NO CONNECTION)
CN303 IS USED FOR ADJUSTMENT AT FACTORY

CN303
1	INT.MONITOR
2	I²C-OPEN
3	GND
4	SDA
5	SCL

CL506A — CL506B CN506

JUNCTION-E CBA
BT6300F01021

1	1	GND	CN702 1
2	2	GND	CN702 2
3	3	GND	CN702 3
4	4	GND	CN702 4

CN503 — CN302 CL302B

JUNCTION-B CBA
BT6300F01011-C

P-SAFETY 1 1	1	1	P-SAFETY 1 CL302A 1
AFC 2	2	2	AFC CL302A 2
H-DRIVE 3	3	3	H-DRIVE CL302A 3
V-RAMP-NF 4	4	4	V-RAMP-NF CL302A 4
GND 5	5	5	GND CL302A 5
ACL 6	6	6	ACL CL302A 6
V-DRIVE 7	7	7	V-DRIVE CL302A 7

CN602 — CN603 CL603B

JUNCTION-A CBA
BT6300F01011-B

GND 1	1	1	GND CL603A 1
GND 2	2	2	GND CL603A 2
AL+15V 3	3	3	AL+15V CL603A 3
AL+12V 4	4	4	AL+12V CL603A 4
P-DOWN-L 5	5	5	P-DOWN-L CL603A 5
AL+5V 6	6	6	AL+5V CL603A 6
AL+12V 7	7	7	AL+12V CL603A 7
AL+9V 8	8	8	AL+9V CL603A 8
TIMER+5V 9	9	9	TIMER+5V CL603A 9
P-ON+8V 10	10	10	P-ON+8V CL603A 10
GND 11	11	11	GND CL603A 11
GND 12	12	12	GND CL603A 12
AL+33V 13	13	13	AL+33V CL603A 13
P-ON-H 14	14	14	P-ON-H CL603A 14
PROTECTOR 15	15	15	PROTECTOR CL603A 15

MAIN CBA
BT6300F01011-A

CN801
SP	1
SP-GND	2

CL801 — SP801 SPEAKER

WIRING DIAGRAM FOR SECTION 2 (DECK MECHANISM)

CN201
C-F/R	1
AL+15V/12V	2
AL+12V	3
P-ON+5V	4
GND	5
C-FG	6
C-CONT	7
GND	8
D-FG	9
LD-CONT	10
D-CONT	11
D-PG	12

CAPSTAN MOTOR

M — LOADING MOTOR

CYLINDER ASSEMBLY

PG SENSOR

M — DRUM MOTOR

CL401
V(R)	1
V-COM	2
V(L)	3

VIDEO (R) HEAD

VIDEO (L) HEAD

CL402
CTL(-)	1
CTL(+)	2
A-PB/REC	3
A-COM	4
AE-H/FE-H	5
AE-H	6

CONTROL HEAD

AUDIO HEAD

AUDIO ERASE HEAD

AC HEAD ASSEMBLY

CL403
FE-H	1
FE-H GND	2

FE HEAD

FULL ERASE HEAD

CN751
1	AL+ 5V	1 CN901
2	SYNC	2 CN901
3	SCL	3 CN901
4	SDA	4 CN901
5	AL+9V	5 CN901
6	GND	6 CN901
7	Y-SW-OUT	7 CN901
8	GND	8 CN901

TEXT CBA
BT6300F01031

CN752
1	P-SAFETY 2	1 CN902
2	OSD-R	2 CN902
3	OSD-B	3 CN902
4	OSD-G	4 CN902
5	PROTECTOR	5 CN902
6	OSD-BLK	6 CN902

SYSTEM CONTROL TIMING CHARTS

Chart 1

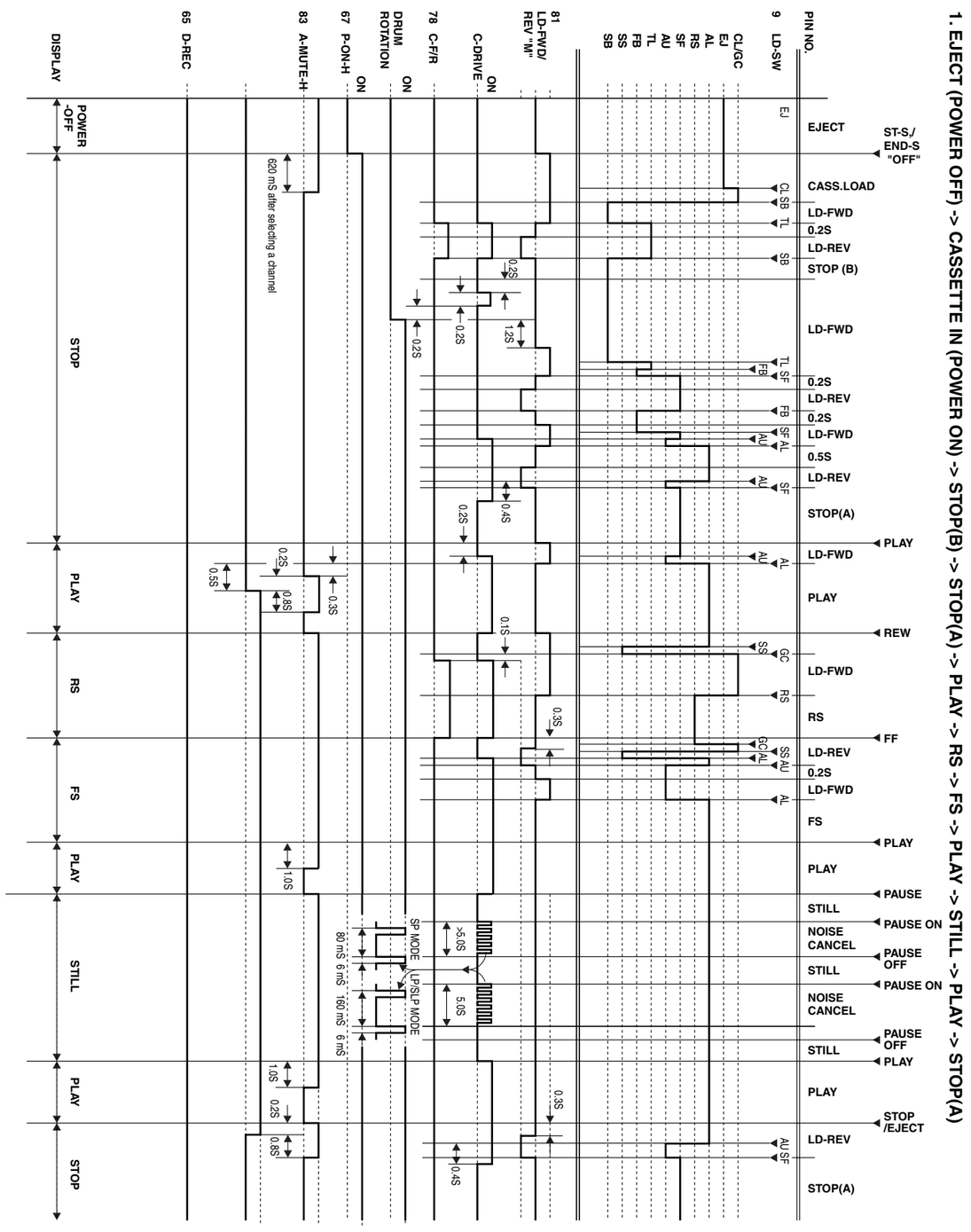
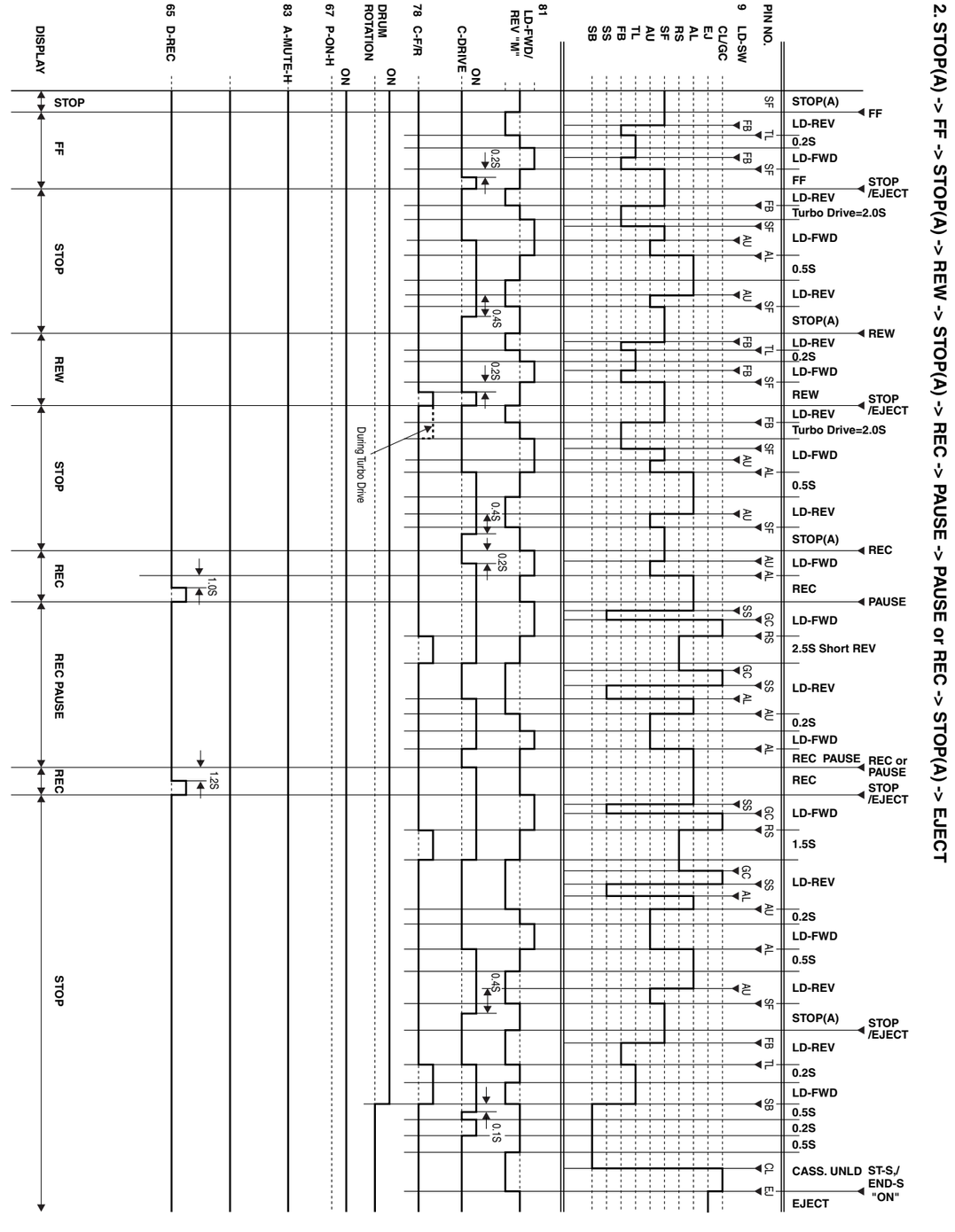


Chart 2



IC PIN FUNCTION DESCRIPTIONS

Comparison Chart of Models and Marks

Model	Mark
14PV360/07	A
14PV365/07	B
14PV360/01	C
14PV365/01	D
14PV365/58	E
14PV360/39	F
14PV365/39	G

IC 201 (TV/VCR Micro Computer)

"H" ≥ 4.5V, "L" ≤ 1.0V

Pin No.	Mark	IN/ OUT	Signal Name	Function
1		IN	AFC2	AFC 2 of Tuner 2
2		IN	P-SAFETY 2	Power Supply Failure Detection 2
3		IN	P-SAFETY 1	Power Supply Failure Detection 1
4		IN	END-SENS	End-Sensor
5		IN	AFC	Automatic Frequency Control Signal
6		IN	V-ENV	Video Envelope Input
7		IN	KEY-1	Key 1 Input
8		IN	KEY-2	Key 2 Input
9		IN	LD-SW	Loading Switch Input
10		IN	ST-SENS	Start-Sensor
11		-	NU	Not Used
12		-	NU	Not Used
13		IN/ OUT	D-V SYNC	Artificial V-Sync Output
14		IN	REMOTE	Remote Signal Input
15		OUT	C-ROTA	Color Phase Rotary Changeover SIgnal
16		OUT	H-A-SW	Video Head Amp Switching Pulse
17		IN	H-A-COMP	Head Amp Comparator Signal
18		OUT	RF-SW	Video Head Switching Pulse
19		-	NU	Not Used
20		IN	DAVN-L	VPS/PDC Data Receive = "L"
21		OUT	1ST-SND-H	Tuner 1 and Tuner 2 Switching Signal
22		OUT	RGB-CONT	RGB Control Signal
23		OUT	REC-LED	Recording LED Control Signal
24		OUT	REC-LED	Recording LED Control Signal
25		-	NU	Not Used
26		-	NU	Not Used
27		-	NU	Not Used
28		-	NU	Not Used
29		IN	RAPID-SW-IN	RAPID-Switch Input Signal from Scart Jack
30		IN	SLOW SW-IN	Slow-Switch Input Signal from Scart Jack
31		IN	REC-SAFETY	Record Protection Tab Detection
32	A,B, C,D, E	-	NU	Not Used
	F,G	IN	SECAM-H	SECAM Mode at High
33	A,B, C,D, E	-	NU	Not Used
	F,G	OUT	TRICK-H	Special Playback = "H" in SECAM Mode
34		IN	RESET	System Reset Signal (Reset="L")
35		IN	XCIN	Sub Clock 32 kHz
36		OUT	XCOUT	Sub Clock 32 kHz
37		-	TIMER+5V	Vcc
38		IN	XIN	Main Clock Input
39		OUT	XOUT	Main Clock Output
40		-	GND	GND
41		OUT	SPOT-KILL	Counter-measure for Spot

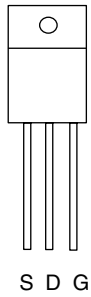
Pin No.	Mark	IN/ OUT	Signal Name	Function
42		OUT	EXT-L	External Input or Playback = Output
43		IN	CLKSEL	Clock Select (GND)
44		OUT	SP-MUTE	Speaker Mute Signal
45		IN	I2C-OPEN	White Balance Adjust Mode Judgment
46		-	GND	GND
47		-	NU	Not Used
48		OUT	SCART-H	Switching Signal of Scart Jack and RCA Jack
49		-	OSDGND	OSD GND
50		-	NU	Not Used
51		-	NU	Not Used
52		-	NU	Not Used
53		-	OSDVcc	OSDVcc
54		-	HLF	HLF
55		-	NU	Not Used
56		IN	C-VIDEO	Video Signal Input
57		-	GND	GND
58		IN	H-SYNC	H-SYNC Input
59		IN	V-SYNC	V-SYNC Input
60		OUT	OSD-BLK	Output for Picture Cut off
61		-	NU	Not Used
62		OUT	OSD-B	Blue Output
63		OUT	OSD-G	Green Output
64		OUT	OSD-R	Red Output
65		OUT	D-REC-H	Delayed Record Signal
66		OUT	C-POWER-SW	Capstan Power Switching Pulse
67		OUT	P-ON-H	Power On Signal at High
68		-	NU	Not Used
69		-	NU	Not Used
70		-	NU	Not Used
71		OUT	SCL	E2PROM/ CHROMA IC Tuner Communication Clock

Pin No.	Mark	IN/ OUT	Signal Name	Function
72		IN/ OUT	SDA	E2PROM/ CHROMA IC Tuner Communication Data
73		OUT	SCART-MUTE	Audio Mute Signal at Scart Jack
74		IN	C-SYNC	C-Sync Input
75		-	NU	Not Used
76		OUT	C-CONT	Capstan Motor Control Signal
77		OUT	D-CONT	Drum Motor Control Signal
78		OUT	C-F/R	Capstan Motor FWD/REV Control Signal (FWD="L"/ REV="H")
79		IN	S-REEL	Supply Reel Rotation Signal
80		IN	T-REEL	Take Up Reel Rotation Signal
81		OUT	LD-CONT	Loading Motor Control Signal
82		OUT	TEXT-L	Teletext Control Signal
83		OUT	A-MUTE-H	Audio Mute Control Signal (Mute = "H")
84		-	NU	Not Used
85		OUT	P-DOWN-L	Power Voltage Down Detector Signal at Low
86		-	NU	Not Used
87		IN	C-FG	Capstan Motor Rotation Detection Pulse
88		-	AMPVss	AMPVss (GND)
89		IN	D-FG	Drum Motor Rotation Detection Pulse
90		IN	D-PG	Drum Motor Pulse Generator
91		OUT	AMPVREF OUT	Standard Voltage Output
92		IN	AMPVREF IN	Standard Voltage Input
93		-	C	C Terminal
94		IN/ OUT	CTL (-)	CTL (-)

Pin No.	Mark	IN/ OUT	Signal Name	Function
95		IN/ OUT	CTL (+)	CTL (+)
96		-	AMPC	AMPC
97		OUT	CTLAMP OUT	Control Amp Output
98		-	AMPVcc	AMPVcc
99		-	AVcc	A/D Converter Power Input/ Standard Voltage Input
100		IN	AGC	IF AGC Control Signal

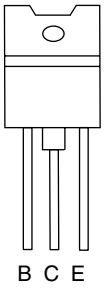
LEAD IDENTIFICATIONS

2SK2662



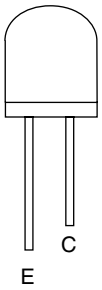
S: Souce
D: Drain
G: Gate

2SD2627LS-FEC-YB11
TT2084LS-YB11

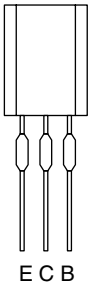


E: Emitter
C: Collector
B: Base

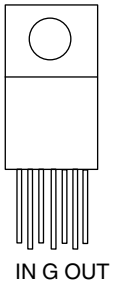
PT204-6B-12
MID-32A22

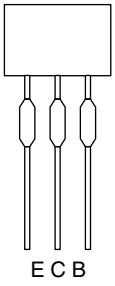


2SD400(F)

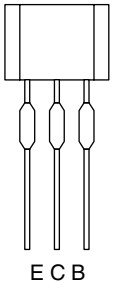


LA78040A
AN5522





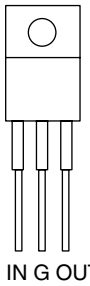
KRA103M
2SA1346
2SC1815-GR(TPE2)
2SC3331(T,U)
2SC2120-(O,Y)(TPE2)
KTC3203(Y)
KTA1266(GR)



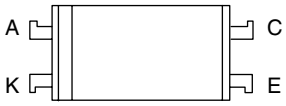
2SC1627Y-TPE2
2SA950(Y,O)
KTA1271(Y)
2SC2482 TPE6
2SC3468(E,D)-AE
KTC3207
2SA1175(F)
KTA1267(GR)
KTC3198(GR)

BN1F4M-T
KTC3199(GR)
2SC2785(J,H,F)
2SA1015-GR(TPE2)

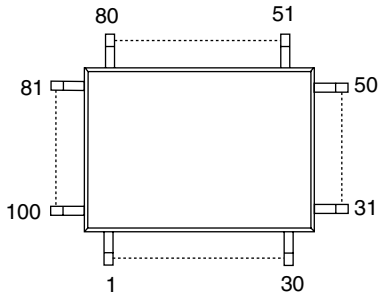
KIA7805API
KA7805A
AN7805F



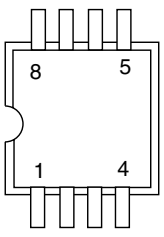
LTV-817(B,C)-F
PC817X6



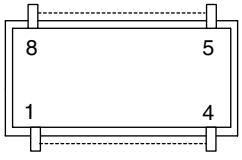
M37760M8H1D8GP
LA71091M



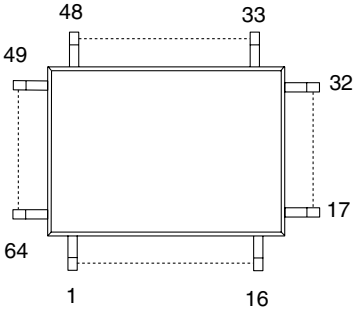
BR24C02F-W
BR24C02F
AT24C02N-10SC
M24C02-MN6



LA4224



M61210FP-R60*
M612106FP-R61
M612106FP-R62*



PRODUCT SAFETY NOTE: Products marked with a ⚠

have special characteristics important to safety.
Before replacing any of these components, read carefully
the product safety notice in this service manual.
Don't degrade the safety of the product through improper servicing.

NOTES:

C…..±0.25% D…..±0.5% F…..±1%
G…..±2% J…..±5% K…..±10%
M…..±20% N…..±30% Z…..+80/-20%

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	**12 NC**	**Description**							
			MMA CBA							
			Consists of the followings							
			MAIN CBA	1	1	1	1	1	1	1
			JUNCTION A CBA	1	1	1	1	1	1	1
			JUNCTION B CBA	1	1	1	1	1	1	1
			JUNCTION C CBA	1	1	1	1	1	1	1
			SENSOR CBA							
			MAIN CBA	1	1	1	1	1	1	1
			CAPACITORS							
C003			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C004			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C005			CERAMIC CAP.(AX) B K 0.01UF/50V	1	1	1	1	1	1	1
C006			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C010			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C012			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C013			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C014			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C015			CERAMIC CAP.(AX) SL J 33PF/50V	1	1	1	1	1	1	1
C016			CERAMIC CAP.(AX) SL J 33PF/50V	1	1	1	1	1	1	1
C017			ELECTROLYTIC CAP. 4.7UF/50V M	1	1	1	1	1	1	1
C101			FILM CAP.(P) 0.056UF/50V J	1	1	1	1	1	1	1
C102			ELECTROLYTIC CAP. 4.7UF/50V M H7	1	1	1	1	1	1	1
C103			ELECTROLYTIC CAP. 10UF/25V M H7	1	1	1	1	1	1	1
C104			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C105			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C106			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C107			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C201			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C202			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C203			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C204			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C205			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C206			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C207			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C208			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C210			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C211			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C212			CERAMIC CAP.(AX) SL J 22PF/50V	1	1	1	1	1	1	1
C213			CERAMIC CAP.(AX) SL J 22PF/50V	1	1	1	1	1	1	1
C214			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C215			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C216			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1	1	1	1	1
C217			CERAMIC CAP.(AX) SL J 10PF/50V	1	1	1	1	1	1	1
C218			CERAMIC CAP.(AX) SL J 10PF/50V	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
C219			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C220			CERAMIC CAP.(AX) X M 4700PF/16V	1	1	1	1	1	1	1
C221			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C222			CERAMIC CAP.(AX) X M 2200PF/16V	1	1	1	1	1	1	1
C223			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C224			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C225			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C232			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C233			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C234			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C235			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C236			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C237			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C238			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C239			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C240			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C241			CERAMIC CAP.(AX) B K 560PF/50V	1	1	1	1	1	1	1
C242			CERAMIC CAP.(AX) X M 4700PF/16V	1	1	1	1	1	1	1
C243			ELECTROLYTIC CAP. 22UF/16V M H7	1	1	1	1	1	1	1
C245			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C246			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C247			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C248			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C249			ELECTROLYTIC CAP. 22UF/50V M	1	1	1	1	1	1	1
C250			CERAMIC CAP.(AX) B K 1000PF/50V	1	1	1	1	1	1	1
C251			CERAMIC CAP.(AX) B K 1000PF/50V	1	1	1	1	1	1	1
C252			ELECTROLYTIC CAP. 100UF/10V M	1	1	1	1	1	1	1
C253			ELECTROLYTIC CAP. 220UF/25V M	1	1	1	1	1	1	1
C255			CERAMIC CAP.(AX) B K 560PF/50V	1	1	1	1	1	1	1
C256			ELECTROLYTIC CAP. 0.1UF/50V M H7	1	1	1	1	1	1	1
C257			ELECTROLYTIC CAP. 220UF/16V M	1	1	1	1	1	1	1
C259			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C260			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C261			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C262			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C301			CERAMIC CAP.(AX) X M 3300PF/16V	1	1	1	1	1	1	1
C302			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C303			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C304			ELECTROLYTIC CAP. 1000UF/6.3V M	1	1	1	1	1	1	1
C305			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C306			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C307			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C313			FILM CAP.(P) 0.01UF/50V J	1	1	1	1	1	1	1
C314			ELECTROLYTIC CAP. 100UF/16V M	1	1	1	1	1	1	1
C315			ELECTROLYTIC CAP. 0.1UF/50V M	1	1	1	1	1	1	1
C316			FILM CAP.(P) 0.1UF/50V J	1	1	1	1	1	1	1
C317			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C318			ELECTROLYTIC CAP. 1000UF/6.3V M	1	1	1	1	1	1	1
C319			CERAMIC CAP.(AX) B K 180PF/50V	1	1	1	1	1	1	1
C320			ELECTROLYTIC CAP. 0.1UF/50V M	1	1	1	1	1	1	1
C321			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C322			ELECTROLYTIC CAP. 0.1UF/50V M	1	1	1	1	1	1	1
C323			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C324			CERAMIC CAP.(AX) B K 150PF/50V	1	1	1	1	1	1	1
C325			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C326			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C327			FILM CAP.(P) 0.015UF/50V J	1	1	1	1	1	1	1
C328			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C329			ELECTROLYTIC CAP. 470UF/10V M	1	1	1	1	1	1	1
C330			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C331			FILM CAP.(P) 0.22UF/50V J	1	1	1	1	1	1	1
C332			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
C334			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C335			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C336			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C337			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C339			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C340			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C343			ELECTROLYTIC CAP. 470UF/10V M	1	1	1	1	1	1	1
C344			FILM CAP.(P) 0.22UF/50V J	1	1	1	1	1	1	1
C345			FILM CAP.(P) 0.047UF/50V J	1	1	1	1	1	1	1
C346			ELECTROLYTIC CAP. 100UF/10V M	1	1	1	1	1	1	1
C347			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C401			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C402			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C403			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C404			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C405			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C406			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C407			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C408			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C409			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C410			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C411			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C412			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C413			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C414			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C415			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C416			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C417			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C418			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C419			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C420			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C421			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C422			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C423			ELECTROLYTIC CAP. 10UF/25V M H7	1	1	1	1	1	1	1
C424			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C425			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C426			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1	1	1	1	1
C427			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C428			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C429			ELECTROLYTIC CAP. 10UF/25V M H7	1	1	1	1	1	1	1
C430			ELECTROLYTIC CAP. 22UF/16V M H7	1	1	1	1	1	1	1
C432			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C433			CERAMIC CAP.(AX) B K 150PF/50V	1	1	1	1	1	1	1
C434			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C435			CERAMIC CAP.(AX) B K 220PF/50V	1	1	1	1	1	1	1
C436			ELECTROLYTIC CAP. 100UF/6.3V H7	1	1	1	1	1	1	1
C437			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C438			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C439			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1	1	1	1	1
C441			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C442			ELECTROLYTIC CAP. 10UF/25V M H7	1	1	1	1	1	1	1
C443			CERAMIC CAP.(AX) B K 1000PF/50V	1	1	1	1	1	1	1
C444			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C445			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C446			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C447			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C448			ELECTROLYTIC CAP. 4.7UF/50V M H7	1	1	1	1	1	1	1
C449			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C450			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C452			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C471			CERAMIC CAP.(AX) Y M 0.01UF/16V						1	1
C472			CERAMIC CAP.(AX) Y M 0.01UF/16V						1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
C473			ELECTROLYTIC CAP. 1UF/50V M H7						1	1
C474			ELECTROLYTIC CAP. 0.47UF/50V M H7						1	1
C475			CERAMIC CAP.(AX) Y M 0.01UF/16V						1	1
C478			ELECTROLYTIC CAP. 10UF/25V M H7						1	1
C479			ELECTROLYTIC CAP. 0.47UF/50V M H7						1	1
C484			CERAMIC CAP.(AX) Y M 0.01UF/16V						1	1
C485			CERAMIC CAP.(AX) Y M 0.01UF/16V						1	1
C486			ELECTROLYTIC CAP. 0.47UF/50V M H7						1	1
C488			CERAMIC CAP.(AX) B K 820PF/50V						1	1
C489			CERAMIC CAP.(AX) B K 820PF/50V						1	1
C491			CERAMIC CAP.(AX) F Z 0.1UF/50V						1	1
C493			ELECTROLYTIC CAP. 2.2UF/50V M H7						1	1
C681			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C682			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C683			ELECTROLYTIC CAP. 100UF/16V M	1	1	1	1	1	1	1
C684			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C685			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C687			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C701			ELECTROLYTIC CAP. 4.7UF/50V M	1	1	1	1	1	1	1
C702			CERAMIC CAP.(AX) B K 330PF/50V	1	1	1	1	1	1	1
C703			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C751			ELECTROLYTIC CAP. 4.7UF/50V M	1	1	1	1	1	1	1
C752			CERAMIC CAP.(AX) X M 6800PF/16V	1	1	1	1	1	1	1
C753			ELECTROLYTIC CAP. 0.22UF/50V M	1	1	1	1	1	1	1
C754			ELECTROLYTIC CAP. 470UF/10V M	1	1	1	1	1	1	1
C755			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C756			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C757			ELECTROLYTIC CAP. 0.47UF/50V M	1	1	1	1	1	1	1
C758			ELECTROLYTIC CAP. 0.47UF/50V M	1	1	1	1	1	1	1
C759			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C760			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C761			CERAMIC CAP.(AX) B K 1000PF/50V	1	1	1	1	1	1	1
C762			CERAMIC CAP.(AX) B K 270PF/50V	1	1	1	1	1	1	1
C767			ELECTROLYTIC CAP. 0.47UF/50V M	1	1	1	1	1	1	1
C768			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C769			ELECTROLYTIC CAP. 470UF/10V M	1	1	1	1	1	1	1
C773			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C774			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C775			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C776			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C777			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C778			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C779			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C801			ELECTROLYTIC CAP. 330UF/16V M	1	1	1	1	1	1	1
C802			ELECTROLYTIC CAP. 470UF/16V M	1	1	1	1	1	1	1
C803			ELECTROLYTIC CAP. 10UF/25V M H7	1	1	1	1	1	1	1
C804			ELECTROLYTIC CAP. 0.22UF/50V M H7	1	1	1	1	1	1	1
C805			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C806			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C807			CERAMIC CAP.(AX) B K 330PF/50V	1	1	1	1	1	1	1
C809			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C810			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C811			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C813			FILM CAP.(P) 0.1UF/50V J	1	1	1	1	1	1	1
C851			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C852			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C853			CERAMIC CAP. B K 470PF/100V	1	1	1	1	1	1	1
C854			FILM CAP.(P) 0.018UF/100V J	1	1	1	1	1	1	1
C855			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1	1	1	1	1
C856			CERAMIC CAP.(AX) X M 1800PF/16V	1	1	1	1	1	1	1
C857			CERAMIC CAP.(AX) X M 1500PF/16V	1	1	1	1	1	1	1
C858			ELECTROLYTIC CAP. 4.7UF/50V M H7	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
C859			CERAMIC CAP.(AX) SL J 33PF/50V	1	1	1	1	1	1	1
C860			ELECTROLYTIC CAP. 10UF/25V M H7	1	1	1	1	1	1	1
C861			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C862			ELECTROLYTIC CAP. 33UF/10V H7	1	1	1	1	1	1	1
C863			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C864			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C865			ELECTROLYTIC CAP. 4.7UF/50V M H7	1	1	1	1	1	1	1
C866			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C867			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C868			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C869			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1
C870			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C871			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1
C872			CERAMIC CAP.(AX) B K 150PF/50V	1	1	1	1	1	1	1
C873			CERAMIC CAP.(AX) B K 150PF/50V	1	1	1	1	1	1	1
C874			CERAMIC CAP.(AX) B K 220PF/50V	1	1	1	1	1	1	1
C875			CERAMIC CAP.(AX) X M 4700PF/16V	1	1	1	1	1	1	1
C876			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C877			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
			MISCELLANEOUS							
CF101		9965 000 13835	CERAMIC RESONATOR 4.433MHZ	1	1	1	1	1	1	1
CL301A		9965 000 13836	LEAD WIRE 4P/300	1	1	1	1	1	1	1
CL302A		9965 000 13837	LEAD WIRE 7P/230	1	1	1	1	1	1	1
CL603A		9965 000 13838	LEAD WIRE 15P(7+8)/330	1	1	1	1	1	1	1
CL702A		9965 000 13839	WIRE 140/BRO/AWG18#1007	1	1	1	1	1	1	1
1005		2422 542 90129	TUN SPLIF V+U PLL IEC BGDKI B	1	1		1	1		1
1005		2422 542 90132	TUN SPLIF V+U PLL IEC BGDKIL B			1			1	
1006		2422 542 90133	TUN IF V+U PLL IEC BGDKIL B			1			1	
1006		2422 542 90128	TUN IF V+U PLL IEC BGDKI B	1	1		1	1		1
1100			CRT A34EAC01X71 (PHCO) B	1	1	1	1	1	1	1
5000		3143 021 00011	DEG COIL FUNAI	1	1	1	1	1	1	1
8000		3143 021 00031	EARTH CABLE	1	1	1	1	1	1	1
8016		2422 070 98211	MAINSCORD EUR 2A5 1M7 BK B	1		1	1		1	1
8016		2422 070 98218	MAINSCORD UK 5A 1M8 BK B		1			1		
8200		3143 021 00021	TUNER CABLE	1	1	1	1	1	1	1
			CONNECTORS							
CN201		9965 000 13840	FFC/FPC CONNECTOR 12P 04 6232 112 103 800	1	1	1	1	1	1	1
CN303		9965 000 13841	CONNECTOR BASE, 5P TUC-P05P-B1	1	1	1	1	1	1	1
CN701		9965 000 05247	CONNECTOR BASE 4P TUC-P04P-B1	1	1	1	1	1	1	1
CN702		9965 000 05247	CONNECTOR BASE 4P TUC-P04P-B1	1	1	1	1	1	1	1
CN751		9965 000 13842	CONNECTOR BASE 8P TUC-P08P-B1	1	1	1	1	1	1	1
CN752		9965 000 13843	CONNECTOR BASE, 6P TUC-P06P-B1	1	1	1	1	1	1	1
CN801		9965 000 13844	STRAIGHT CONNECTOR BASE 00 8283 0212 00 000	1	1	1	1	1	1	1
			DIODES							
D201		9965 000 05250	LED SIR-563ST3F P	1	1	1	1	1	1	1
D203		9965 000 13846	LED(RED) L-1513EC	1	1	1	1	1	1	1
D206		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1
D207		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1
D208		9965 000 13847	DIODE 1N5397-B	1	1	1	1	1	1	1
D210		4822 130 83166	ZENER DIODE MTZJT-776.2B	1	1	1	1	1	1	1
D211		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D212			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D213		4822 130 83166	ZENER DIODE MTZJT-776.2B	1	1	1	1	1	1	1
D214		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D215		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D216		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D217		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D218		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1
D301		9965 000 11153	ZENER DIODE MTZJT-778.2B	1	1	1	1	1	1	1
D304		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D305		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D306		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	**⚠**	**12 NC**	**Description**							
D307		9965 000 11153	ZENER DIODE MTZJT-778.2B	1	1	1	1	1	1	1
D309		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D312		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D401		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D402		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D471		4822 130 32778	SWITCHING DIODE 1SS133(T-77)						1	1
D680		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D681		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D682		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D683		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D684		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1
D685		4822 130 11629	ZENER DIODE MTZJT-776.8B	1	1	1	1	1	1	1
D686		9965 000 13847	DIODE 1N5397-B	1	1	1	1	1	1	1
D702		4822 130 83166	ZENER DIODE MTZJT-776.2B	1	1	1	1	1	1	1
D751		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D752		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D754		9965 000 12904	ZENER DIODE DZ-5.1BSBT265	1	1	1	1	1	1	1
D755		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D757		4822 130 83166	ZENER DIODE MTZJT-776.2B	1	1	1	1	1	1	1
D758		4822 130 83166	ZENER DIODE MTZJT-776.2B	1	1	1	1	1	1	1
D759		4822 130 83166	ZENER DIODE MTZJT-776.2B	1	1	1	1	1	1	1
D760		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1
D761		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D762		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D763		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D764		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D801		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D802			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D804		9965 000 13848	ZENER DIODE MTZJT-777.5B	1	1	1	1	1	1	1
D805		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D806		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
			IC's							
IC101		9965 000 13926	IC/VPS,PDC LC74793	1	1	1	1	1	1	1
IC201		9965 000 13849	MICRO COMPUTER M37760MFH7B7GP	1	1	1	1	1	1	1
IC202		9965 000 13030	IC:MEMORY BR24C04F-W	1	1	1	1	1	1	1
IC301		9965 000 13850	IC:CHROMA/IF 1 CHIP M61209FP-R609	1	1	1	1	1	1	1
IC401		9965 000 12180	IC:Y/C/A LA71750AM-MTB	1	1	1	1	1	1	1
IC471		9965 000 13927	IC:SECAM LA70100M-MPB						1	1
IC602		9965 000 13851	VOLTAGE REGULATOR KIA7805API	1	1	1	1	1	1	1
IC751		9965 000 13852	IC:SWITCH TC4053BF(N)	1	1	1	1	1	1	1
IC752		9965 000 13852	IC:SWITCH TC4053BF(N)	1	1	1	1	1	1	1
IC754		9965 000 13852	IC:SWITCH TC4053BF(N)	1	1	1	1	1	1	1
IC801		9965 000 13853	AUDIO AMP LA4224	1	1	1	1	1	1	1
			RCA JACK							
JK701		4822 265 11659	RCA JACK(YELLOW) MSP-281V4-B	1	1	1	1	1	1	1
JK702		4822 265 11661	RCA JACK(WHITE) MSP-281V1-B	1	1	1	1	1	1	1
JK751		9965 000 13854	SKIRT JACK 21P HRC-21V-02P	1	1	1	1	1	1	1
JK801		9965 000 13855	HEADPHONE JACK MSJ-035-10A B	1	1	1	1	1	1	1
			COILS							
L001		4822 157 10326	INDUCTOR 10UH-K-5FT	1	1	1	1	1	1	1
L002		9965 000 13856	INDUCTOR 1.0UH-J-26T	1	1	1	1	1	1	1
L003		9965 000 13856	INDUCTOR 1.0UH-J-26T	1	1	1	1	1	1	1
L101			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L201		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1
L202		9965 000 13857	INDUCTOR 0.10UH-K-26T	1	1	1	1	1	1	1
L203		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1
L301		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1
L302		9965 000 13858	INDUCTOR 33UH-J-26T	1	1	1	1	1	1	1
L303		9965 000 13858	INDUCTOR 33UH-J-26T	1	1	1	1	1	1	1
L304			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L401		9965 000 13859	INDUCTOR 22UH-J-26T	1	1	1	1	1	1	1
L403		9965 000 13858	INDUCTOR 33UH-J-26T	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
L485			PCB JUMPER D0.6-P5.0						1	1
L751		9965 000 13860	INDUCTOR 12UH-J-26T	1	1	1	1	1	1	1
L752		9965 000 13861	INDUCTOR 1.2UH-J-26T	1	1	1	1	1	1	1
L801		9965 000 13856	INDUCTOR 1.0UH-J-26T	1	1	1	1	1	1	1
L851			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L852		9965 000 05705	INDUCTOR 47UH-K-5FT	1	1	1	1	1	1	1
L853			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L854			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L856			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
			TRANSISTORS							
PI201		9965 000 12189	PHOTO INTERRUPTER RPI-302C70	1	1	1	1	1	1	1
Q205		9965 000 13862	TRANSISTOR 2SB892(S)	1	1	1	1	1	1	1
Q206		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12	1	1	1	1	1	1	1
Q207		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M	1	1	1	1	1	1	1
Q208		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q401		4822 130 42959	TRANSISTOR KTA1266(GR)	1	1	1	1	1	1	1
Q402		4822 130 11101	TRANSISTOR 2SA1015-GR(TPE2)	1	1	1	1	1	1	1
Q471		9965 000 05643	TRANSISTOR 2SC2785(F)						1	1
Q680		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1	1	1	1	1	1	1
Q681		9965 000 13863	TRANSISTOR 2SD1913(R)	1	1	1	1	1	1	1
Q682		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q751		4822 130 11101	TRANSISTOR 2SA1015-GR(TPE2)	1	1	1	1	1	1	1
Q752		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q753		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q754		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q755		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q756		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q757		4822 130 11101	TRANSISTOR 2SA1015-GR(TPE2)	1	1	1	1	1	1	1
Q758		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q759		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q760		4822 130 10145	RES. BUILT-IN TRANSISTOR KRA103M	1	1	1	1	1	1	1
Q761		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q851		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q852		4822 130 11101	TRANSISTOR 2SA1015-GR(TPE2)	1	1	1	1	1	1	1
Q853		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1	1	1	1	1	1	1
Q854		4822 130 10097	TRANSISTOR 2SC3331(T)	1	1	1	1	1	1	1
Q855		4822 130 10097	TRANSISTOR 2SC3331(T)	1	1	1	1	1	1	1
Q856		4822 130 10145	RES. BUILT-IN TRANSISTOR KRA103M	1	1	1	1	1	1	1
Q857		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
			RESISTORS							
R002			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R102			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R103			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R104			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R105			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R106			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R107			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R201			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R202			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R203			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R204			CARBON RES. 1/4W J 390K OHM	1	1	1	1	1	1	1
R205			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R206			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R207			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R208			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R209			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R210			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R211			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R212			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R213			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R214			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R215			CARBON RES. 1/4W G 4.7K OHM	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
R216			CARBON RES. 1/4W G 1.5K OHM	1	1	1	1	1	1	1
R217			CARBON RES. 1/4W G 22K OHM	1	1	1	1	1	1	1
R218			CARBON RES. 1/4W G 470 OHM	1	1	1	1	1	1	1
R219			CARBON RES. 1/4W G 10K OHM	1	1	1	1	1	1	1
R220			CARBON RES. 1/4W G 3.6K OHM	1	1	1	1	1	1	1
R221			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R222			CARBON RES. 1/4W J 390K OHM	1	1	1	1	1	1	1
R223			CARBON RES. 1/4W J 270 OHM	1	1	1	1	1	1	1
R224			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R225			CARBON RES. 1/4W J 330 OHM	1	1	1	1	1	1	1
R226			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R227			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R228			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1
R229			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R231			PCB JUMPER D0.6-P5.0	1	1	1	1	1		
R232			CARBON RES. 1/4W J 10K OHM						1	1
R233			CARBON RES. 1/4W J 10K OHM						1	1
R234			CARBON RES. 1/4W J 47 OHM	1	1	1	1	1	1	1
R236			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R237			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R238			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R239			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R240			CARBON RES. 1/4W J 330K OHM	1	1	1	1	1	1	1
R241			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R242			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R243			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1
R244			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1
R245			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R246			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R247			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R248			CARBON RES. 1/4W J 470 OHM	1	1	1	1	1	1	1
R249			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R250			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R257			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R258			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R259			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R260			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R261			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R262			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R263			CARBON RES. 1/4W J 68K OHM	1	1	1	1	1	1	1
R264			CARBON RES. 1/4W J 220K OHM	1	1	1	1	1	1	1
R265			CARBON RES. 1/4W J 33K OHM	1	1	1	1	1	1	1
R266			CARBON RES. 1/4W J 33K OHM	1	1	1	1	1	1	1
R267			CARBON RES. 1/4W J 180 OHM	1	1	1	1	1	1	1
R268			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R269			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R270			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1
R271			CARBON RES. 1/4W J 1.8K OHM	1	1	1	1	1	1	1
R273			CARBON RES. 1/4W J 6.8K OHM	1	1	1	1	1	1	1
R274			CARBON RES. 1/4W J 1M OHM	1	1	1	1	1	1	1
R275			METAL OXIDE FILM RES. 1W J 2.2 OHM	1	1	1	1	1	1	1
R276			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R277			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R278			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R283			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R284			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R285			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R302			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R303			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R304			CARBON RES. 1/4W J 6.8K OHM	1	1	1	1	1	1	1
R305			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R306			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
R307			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R309			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R310			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R311			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R312			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R313			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R314			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R315			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R316			CARBON RES. 1/4W J 12 OHM	1	1	1	1	1	1	1
R318			CARBON RES. 1/4W J 220K OHM	1	1	1	1	1	1	1
R319			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R320			CARBON RES. 1/4W J 150K OHM	1	1	1	1	1	1	1
R321			CARBON RES. 1/4W J 15K OHM	1	1	1	1	1	1	1
R322			CARBON RES. 1/4W J 220K OHM	1	1	1	1	1	1	1
R323			CARBON RES. 1/4W J 6.8K OHM	1	1	1	1	1	1	1
R325			CARBON RES. 1/4W J 1M OHM	1	1	1	1	1	1	1
R327			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R328			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R329			CARBON RES. 1/4W J 3.9K OHM	1	1	1	1	1	1	1
R334			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R335			CARBON RES. 1/4W J 18K OHM	1	1	1	1	1	1	1
R336			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R337			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R338			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R352			CARBON RES. 1/4W J 22 OHM	1	1	1	1	1	1	1
R353			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R391			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R392			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R393			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R400			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R401			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R402			CARBON RES. 1/4W J 8.2K OHM	1	1	1	1	1	1	1
R405			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R406			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R407			CARBON RES. 1/4W J 6.8K OHM	1	1	1	1	1	1	1
R408			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R409			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R410			CARBON RES. 1/4W J 18K OHM	1	1	1	1	1	1	1
R411			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R412			CARBON RES. 1/4W J 18K OHM	1	1	1	1	1	1	1
R413			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R414			CARBON RES. 1/4W J 3.3K OHM	1	1	1	1	1	1	1
R415			CARBON RES. 1/4W J 6.8K OHM	1	1	1	1	1	1	1
R416			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R417			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R420			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R421			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R424			CARBON RES. 1/4W J 1.8K OHM	1	1	1	1	1	1	1
R425			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R426			CARBON RES. 1/4W J 330 OHM	1	1	1	1	1	1	1
R427			CARBON RES. 1/4W J 330 OHM	1	1	1	1	1	1	1
R428			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R429			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R430			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1
R431			CARBON RES. 1/4W J 390K OHM	1	1	1	1	1	1	1
R471			PCB JUMPER D0.6-P5.0						1	1
R473			CARBON RES. 1/4W J 2.2K OHM						1	1
R475			CARBON RES. 1/4W J 2.7K OHM						1	1
R476			CARBON RES. 1/4W J 1.8K OHM						1	1
R680			METAL OXIDE FILM RES. 2W J 47 OHM	1	1	1	1	1	1	1
R681			METAL OXIDE FILM RES. 2W J 47 OHM	1	1	1	1	1	1	1
R682			CARBON RES. 1/2W J 5.6 OHM	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
R683			METAL OXIDE FILM RES. 2W J 2.2 OHM	1	1	1	1	1	1	1
R684			CARBON RES. 1/4W J 10 OHM	1	1	1	1	1	1	1
R685			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R686			METAL OXIDE FILM RES. 2W J 2.2 OHM	1	1	1	1	1	1	1
R687			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R688			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R701			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R702			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R703			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R704			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R750			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R751			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R752			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R753			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R754			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R755			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R756			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R757			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R758			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R759			CARBON RES. 1/4W J 390 OHM	1	1	1	1	1	1	1
R760			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R761			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R762			CARBON RES. 1/4W J 3.3K OHM	1	1	1	1	1	1	1
R763			CARBON RES. 1/4W J 750 OHM	1	1	1	1	1	1	1
R766			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R767			CARBON RES. 1/4W J 33K OHM	1	1	1	1	1	1	1
R768			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R770			CARBON RES. 1/4W J 1.8K OHM	1	1	1	1	1	1	1
R771			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R772			CARBON RES. 1/4W J 33K OHM	1	1	1	1	1	1	1
R774			CARBON RES. 1/4W J 1.8K OHM	1	1	1	1	1	1	1
R775			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R777			CARBON RES. 1/4W J 1.8K OHM	1	1	1	1	1	1	1
R778			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R779			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R780			CARBON RES. 1/4W J 33K OHM	1	1	1	1	1	1	1
R787			CARBON RES. 1/4W J 6.2K OHM	1	1	1	1	1	1	1
R788			CARBON RES. 1/4W J 6.2K OHM	1	1	1	1	1	1	1
R789			CARBON RES. 1/4W J 6.2K OHM	1	1	1	1	1	1	1
R790			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R791			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R792			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R793			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R794			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R795			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R796			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R797			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R798			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R799			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R801			METAL OXIDE FILM RES. 1W J 12 OHM	1	1	1	1	1	1	1
R802			CARBON RES. 1/4W J 10 OHM	1	1	1	1	1	1	1
R803			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R804			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R805			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R806			CARBON RES. 1/4W J 47 OHM	1	1	1	1	1	1	1
R807			CARBON RES. 1/4W J 47 OHM	1	1	1	1	1	1	1
R810			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R812			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R814			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R815			CARBON RES. 1/4W J 470K OHM	1	1	1	1	1	1	1
R816			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R817			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
R818			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R819			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R820			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R821			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R822			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R823			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R824			CARBON RES. 1/4W J 75 OHM	1	1	1	1	1	1	1
R825			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R826			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R828			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R829			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R830			CARBON RES. 1/4W J 220K OHM	1	1	1	1	1	1	1
R831			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R834			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R835			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R836			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R851			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R852			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R853			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R854			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R855			CARBON RES. 1/4W J 820 OHM	1	1	1	1	1	1	1
R856			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R857			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R859			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1
R860			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R861			CARBON RES. 1/4W J 120 OHM	1	1	1	1	1	1	1
R862			CARBON RES. 1/4W J 330K OHM	1	1	1	1	1	1	1
R863			CARBON RES. 1/4W J 12K OHM	1	1	1	1	1	1	1
R864			CARBON RES. 1/4W J 1.8K OHM	1	1	1	1	1	1	1
R865			CARBON RES. 1/4W J 12K OHM	1	1	1	1	1	1	1
R866			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R867			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R868			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R869			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R870			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1
R871			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R872			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R874			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R875			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R876			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R877			CARBON RES. 1/4W J 12K OHM	1	1	1	1	1	1	1
R878			CARBON RES. 1/4W J 1M OHM	1	1	1	1	1	1	1
R879			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
RS201		9965 000 08668	REMOTE RECEIVER PIC-37042LU	1	1	1	1	1	1	1
RS201		9965 000 10857	REMOTE RECEIVER MIM-93M6DKF	1	1	1	1	1	1	1
			SWITCHES							
SW201		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW202		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW203		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW204		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW205		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW206		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW207		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW208		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW209		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW210		9965 000 13864	TACT SWITCH SKQSAB	1	1	1	1	1	1	1
SW211		9965 000 12285	LEAF SWITCH LSA-1142AU	1	1	1	1	1	1	1
SW212		9965 000 08561	ROTARY MODE SWITCH SSS-43MD	1	1	1	1	1	1	1
			MISCELLANEOUS							
TB3		9965 000 13865	HEAD SHIELD T6300RA	1	1	1	1	1	1	1
TB7		9965 000 13866	LED HOLDER T6300RA	1	1	1	1	1	1	1
TB15		9965 000 12173	ROHM HOLDER H7770JD	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
TB21		9965 000 08566	BUSH, LED(F) H3700UD	1	1	1	1	1	1	1
TB31		9965 000 13867	HEAD SHIELD COVER T6300RA	1	1	1	1	1	1	1
TB3-1		9965 000 13868	HEAD SHIELD T6300RA	1	1	1	1	1	1	1
TB3-2		9965 000 13870	EARTH PLATE S T6300RA	1	1	1	1	1	1	1
TP001			PCB JUMPER D0.6-P12.5	1	1	1	1	1	1	1
TP002			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1
TP003			PCB JUMPER D0.6-P12.5	1	1	1	1	1	1	1
TP004			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1
TP006			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1
TP007			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1
X201		9965 000 09200	X'TAL 32.768KHZ(20PPM)	1	1	1	1	1	1	1
X202		9965 000 12194	X'TAL 12.000MHZ	1	1	1	1	1	1	1
X301		9965 000 13869	X'TAL 4.433619MHZ	1	1	1	1	1	1	1
X401		9965 000 05629	X'TAL 4.433619MHZ	1	1	1	1	1	1	1
			JUNCTION A CBA	1	1	1	1	1	1	1
CN603		9965 000 13871	CONNECTOR, 15P TUC-P15X-B1	1	1	1	1	1	1	1
			JUNCTION B CBA	1	1	1	1	1	1	1
CN302		9965 000 13872	CONNECTOR, 7P TUC-P07X-B1	1	1	1	1	1	1	1
			JUNCTION C CBA	1	1	1	1	1	1	1
CN301		9965 000 05261	CONNECTOR 4P TUC-P04X-B1	1	1	1	1	1	1	1
			SENSOR CBA							
Q201		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12	1	1	1	1	1	1	1
Q202		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12	1	1	1	1	1	1	1
			POWER CBA							
			Consists of the followings							
			H.V./POWER SUPPLY CBA	1	1	1	1	1	1	1
			CRT CBA	1	1	1	1	1	1	1
			JUNCTION D CBA	1	1	1	1	1	1	1
			JUNCTION E CBA	1	1	1	1	1	1	1
			H.V./POWER SUPPLY CBA	1	1	1	1	1	1	1
BC571		9965 000 13874	BEAD INDUCTORS FBA04HA600VB-00	1	1	1	1	1	1	1
BC602		9965 000 13875	BEAD INDUCTORS FBR07HA121TB-00	1	1	1	1	1	1	1
BC603		9965 000 13875	BEAD INDUCTORS FBR07HA121TB-00	1	1	1	1	1	1	1
BC604		9965 000 13875	BEAD INDUCTORS FBR07HA121TB-00	1	1	1	1	1	1	1
BC605			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
BC606			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
			CAPACITORS							
C552			FILM CAP.(P) 0.047UF/50V J	1	1	1	1	1	1	1
C553			ELECTROLYTIC CAP. 2.2UF/50V M LL	1	1	1	1	1	1	1
C555			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C556			ELECTROLYTIC CAP. 1000UF/25V M	1	1	1	1	1	1	1
C558			CERAMIC CAP.(AX) B K 0.01UF/50V	1	1	1	1	1	1	1
C559			ELECTROLYTIC CAP. 330UF/35V M	1	1	1	1	1	1	1
C562			ELECTROLYTIC CAP. 10UF/160V M	1	1	1	1	1	1	1
C571			P.P. CAP 0.18UF/200V J	1	1	1	1	1	1	1
C572			P.P. CAP 0.15UF/200V J	1	1	1	1	1	1	1
C574			ELECTROLYTIC CAP. 4.7UF/250V M	1	1	1	1	1	1	1
C577			FILM CAP.(P) 0.01UF/50V J	1	1	1	1	1	1	1
C578			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C580			P.P. CAP 0.0082UF/1.6K J	1	1	1	1	1	1	1
C581			CERAMIC CAP. BN 680PF/2KV	1	1	1	1	1	1	1
C584			ELECTROLYTIC CAP. 1UF/160V M	1	1	1	1	1	1	1
C591			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C592			ELECTROLYTIC CAP. 22UF/50V M	1	1	1	1	1	1	1
C604	⚠	9965 000 14279	SAFETY CAP. 2200PF/250V KX	1	1	1	1	1	1	1
C607	⚠	9965 000 14280	METALLIZED FILM CAP. 0.1UF/250V	1	1	1	1	1	1	1
C608	⚠	9965 000 14280	METALLIZED FILM CAP. 0.1UF/250V	1	1	1	1	1	1	1
C609			CERAMIC CAP. F Z 0.01UF/500V	1	1	1	1	1	1	1
C610			CERAMIC CAP. F Z 0.01UF/500V	1	1	1	1	1	1	1
C611			CERAMIC CAP. F Z 0.01UF/500V	1	1	1	1	1	1	1
C612			CERAMIC CAP. F Z 0.01UF/500V	1	1	1	1	1	1	1
C613			ELECTROLYTIC CAP. 100UF/400V M	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
C614			FILM CAP.(P) 0.082UF/50V J	1	1	1	1	1	1	1
C615			CERAMIC CAP. BN J 220PF/2KV	1	1	1	1	1	1	1
C616			FILM CAP.(P) 0.001UF/50V J	1	1	1	1	1	1	1
C618			FILM CAP.(P) 0.047UF/50V J	1	1	1	1	1	1	1
C621			CERAMIC CAP. BN 680PF/2KV	1	1	1	1	1	1	1
C623			ELECTROLYTIC CAP. 470UF/35V M	1	1	1	1	1	1	1
C624			ELECTROLYTIC CAP. 1000UF/16V M	1	1	1	1	1	1	1
C625			ELECTROLYTIC CAP. 470UF/25V M	1	1	1	1	1	1	1
C628			ELECTROLYTIC CAP. 100UF/160V M	1	1	1	1	1	1	1
C629			CERAMIC CAP.(AX) B K 0.01UF/50V	1	1	1	1	1	1	1
C630			ELECTROLYTIC CAP. 470UF/16V M	1	1	1	1	1	1	1
C631			ELECTROLYTIC CAP. 1000UF/16V M	1	1	1	1	1	1	1
C632			ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C639			CERAMIC CAP.(AX) SL J 68PF/50V	1	1	1	1	1	1	1
C641			ELECTROLYTIC CAP. 4.7UF/50V M	1	1	1	1	1	1	1
C647			ELECTROLYTIC CAP. 100UF/16V M	1	1	1	1	1	1	1
C648			ELECTROLYTIC CAP. 100UF/16V M	1	1	1	1	1	1	1
C649			ELECTROLYTIC CAP. 47UF/25V M	1	1	1	1	1	1	1
C654			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1
C655			ELECTROLYTIC CAP. 220UF/6.3V M	1	1	1	1	1	1	1
C666			ELECTROLYTIC CAP. 470UF/16V M	1	1	1	1	1	1	1
			CONNECTORS							
CN571		9965 000 13876	CONNECTOR BASE, 5P TV-50P-05-V3	1	1	1	1	1	1	1
CN601		9965 000 13877	CONNECTOR BASE, 2P TV-50P-02-V3	1	1	1	1	1	1	1
CN602		9965 000 13878	CONNECTOR BASE 15P TUC-P15P-B1	1	1	1	1	1	1	1
			DIODES							
D552		9965 000 13847	DIODE 1N5397-B	1	1	1	1	1	1	1
D571		9965 000 13879	DIODE FR154	1	1	1	1	1	1	1
D572		9965 000 13880	DIODE FR104-B	1	1	1	1	1	1	1
D573			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D584		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D585		9965 000 12904	ZENER DIODE DZ-5.1BSBT265	1	1	1	1	1	1	1
D591		9965 000 13881	ZENER DIODE MTZJT-7736B	1	1	1	1	1	1	1
D593			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D595		9965 000 13882	ZENER DIODE MTZJT-7718B	1	1	1	1	1	1	1
D596		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D597		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D598		9965 000 13880	DIODE FR104-B	1	1	1	1	1	1	1
D603		9965 000 13883	DIODE 1N5399-B/P	1	1	1	1	1	1	1
D604		9965 000 13883	DIODE 1N5399-B/P	1	1	1	1	1	1	1
D605		9965 000 13883	DIODE 1N5399-B/P	1	1	1	1	1	1	1
D606		9965 000 13883	DIODE 1N5399-B/P	1	1	1	1	1	1	1
D608		9965 000 13884	ZENER DIODE MTZJT-7720C	1	1	1	1	1	1	1
D609		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D613		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1
D614		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D621		9965 000 13885	FAST RECOVERY DIODE CA201-4	1	1	1	1	1	1	1
D622		9965 000 13880	DIODE FR104-B	1	1	1	1	1	1	1
D623		9965 000 13886	DIODE 1ZC33	1	1	1	1	1	1	1
D624		4822 130 80601	SCHOTTKY BARRIER DIODE ERB81-004	1	1	1	1	1	1	1
D625		4822 130 83194	SCHOTTKY BARRIER DIODE 11EQS04	1	1	1	1	1	1	1
D626		4822 130 83883	RECTIFIER DIODE FR202	1	1	1	1	1	1	1
D627		4822 130 83194	SCHOTTKY BARRIER DIODE 11EQS04	1	1	1	1	1	1	1
D629		9965 000 13880	DIODE FR104-B	1	1	1	1	1	1	1
D631		4822 130 11629	ZENER DIODE MTZJT-776.8B	1	1	1	1	1	1	1
D632		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D634		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D635		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D636		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D637		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D638		9965 000 13887	ZENER DIODE MTZJT-7716B	1	1	1	1	1	1	1
D639		4822 130 81729	ZENER DIODE MTZJT-7733C	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	**12 NC**	**Description**							
D640		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D641		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D643		9965 000 13888	ZENER DIODE MTZJT-776.8A	1	1	1	1	1	1	1
D644		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D645		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D646		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D647		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D648		9965 000 11153	ZENER DIODE MTZJT-778.2B	1	1	1	1	1	1	1
D649		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D650		9965 000 13889	ZENER DIODE MTZJT-7724B	1	1	1	1	1	1	1
D651		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
F601	⚠	9965 000 13890	FUSE 4A/250V 215004	1	1	1	1	1	1	1
FH601		4822 256 10461	FUSE HOLDER MSF-015	1	1	1	1	1	1	1
FH602		4822 256 10461	FUSE HOLDER MSF-015	1	1	1	1	1	1	1
			IC's							
IC551		9965 000 13891	VERTICAL OUTPUT IC AN5522	1	1	1	1	1	1	1
IC601	⚠	9965 000 13892	PHOTO COUPLER LTV817MBF	1	1	1	1	1	1	1
			COILS							
L572		9965 000 13893	INDUCTOR 100UH-J-26T	1	1	1	1	1	1	1
L601		9965 000 13894	LINE FILTER ELF15N007A	1	1	1	1	1	1	1
L602		9965 000 13894	LINE FILTER ELF15N007A	1	1	1	1	1	1	1
L603			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L604			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L605		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1
PB1		9965 000 13895	POWER PCB HOLDER T6300RA	1	1	1	1	1	1	1
PB4			13V H/V HEAT SINK(PDX) T5100UA	1	1	1	1	1	1	1
PB5			13VPOW HEAT SINK PFD ASSEMBLY T5200UA	1	1	1	1	1	1	1
PL1		9965 000 08646	SCREW, P-TIGHT 3X12 WASHER HEAD+	1	1	1	1	1	1	1
PL2		9965 000 12171	SCREW, B-TIGHT M3X8 BIND HEAD+	1	1	1	1	1	1	1
PL2		9965 000 12171	SCREW, B-TIGHT M3X8 BIND HEAD+	1	1	1	1	1	1	1
PS602		9965 000 13896	THERMISTOR ZPB31BL9R0A	1	1	1	1	1	1	1
			TRANSISTORS							
Q571		9965 000 13897	TRANSISTOR TT2084LS-YB11	1	1	1	1	1	1	1
Q572		9965 000 13899	TRANSISTOR 2SC1627Y-TPE2	1	1	1	1	1	1	1
Q591		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q601		9965 000 13901	MOS FET 2SK2647	1	1	1	1	1	1	1
Q602		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1	1	1	1	1	1	1
Q611		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q612		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q613		9965 000 13900	TRANSISTOR 2SA950(O)	1	1	1	1	1	1	1
Q614		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q616		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1	1	1	1	1	1	1
Q617		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1	1	1	1	1	1	1
Q619		4822 130 10145	RES. BUILT-IN TRANSISTOR KRA103M	1	1	1	1	1	1	1
			RESISTORS							
R551			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R552			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R556			CARBON RES. 1/4W J 4.7 OHM	1	1	1	1	1	1	1
R557			CARBON RES. 1/4W J 270 OHM	1	1	1	1	1	1	1
R558			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R559			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R560			CARBON RES. 1/4W J 3.9K OHM	1	1	1	1	1	1	1
R561			CARBON RES. 1/4W J 8.2K OHM	1	1	1	1	1	1	1
R562			CARBON RES. 1/4W J 5.6 OHM	1	1	1	1	1	1	1
R563			CARBON RES. 1/4W J 5.6 OHM	1	1	1	1	1	1	1
R565			CARBON RES. 1/4W J 3.9 OHM	1	1	1	1	1	1	1
R566			CARBON RES. 1/4W J 3.9 OHM	1	1	1	1	1	1	1
R567			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R570			CARBON RES. 1/4W J 3.9 OHM	1	1	1	1	1	1	1
R573			CARBON RES. 1/4W J 470 OHM	1	1	1	1	1	1	1
R574			METAL OXIDE FILM RES. 2W J 1.5K OHM	1	1	1	1	1	1	1
R575			METAL OXIDE FILM RES. 2W J 1.5K OHM	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	12 NC	Description							
R576			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R577			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R578			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R579			METAL OXIDE FILM RES. 2W J 1.5K OHM	1	1	1	1	1	1	1
R581			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R583			METAL OXIDE FILM RES. 1W J 1.8 OHM	1	1	1	1	1	1	1
R584			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R585			CARBON RES. 1/4W J 8.2K OHM	1	1	1	1	1	1	1
R586			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R587			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R588			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R590			METAL OXIDE FILM RES. 2W J 100 OHM	1	1	1	1	1	1	1
R591			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R592			CARBON RES. 1/6W J 180K OHM	1	1	1	1	1	1	1
R593			CARBON RES. 1/6W J 56K OHM	1	1	1	1	1	1	1
R594			CARBON RES. 1/6W J 56K OHM	1	1	1	1	1	1	1
R595			CARBON RES. 1/6W J 10K OHM	1	1	1	1	1	1	1
R596			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R597			CARBON RES. 1/4W J 8.2K OHM	1	1	1	1	1	1	1
R598			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R599			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R601			ANTI-SURGE RESISTOR 1/2W J 3.3M OHM	1	1	1	1	1	1	1
R602	⚠	RW051R8PG001	CEMENT RESISTOR 5W K 1.8 OHM	1	1	1	1	1	1	1
R602	⚠	9965 000 14277	CEMENT RESISTOR 5W 1.8 OHM	1	1	1	1	1	1	1
R603	⚠	9965 000 14278	CEMENT RES. 5W K 0.68 OHM	1	1	1	1	1	1	1
R604			CARBON RES. 1/4W J 22 OHM	1	1	1	1	1	1	1
R605			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R606			CARBON RES. 1/4W J 1.5M OHM	1	1	1	1	1	1	1
R607			CARBON RES. 1/4W J 1.5M OHM	1	1	1	1	1	1	1
R609			CARBON RES. 1/4W J 1.5M OHM	1	1	1	1	1	1	1
R611			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R612			CARBON RES. 1/4W J 470K OHM	1	1	1	1	1	1	1
R613			CARBON RES. 1/4W J 180 OHM	1	1	1	1	1	1	1
R614			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R617			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1
R618			CARBON RES. 1/4W J 56 OHM	1	1	1	1	1	1	1
R620			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R621			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R625			CARBON RES. 1/4W J 180 OHM	1	1	1	1	1	1	1
R626			CARBON RES. 1/4W 2.2 OHM J	1	1	1	1	1	1	1
R628			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R629			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R630			CARBON RES. 1/4W J 33K OHM	1	1	1	1	1	1	1
R631			CARBON RES. 1/4W J 39K OHM	1	1	1	1	1	1	1
R632			CARBON RES. 1/4W J 39K OHM	1	1	1	1	1	1	1
R633			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R634			CARBON RES. 1/4W J 15K OHM	1	1	1	1	1	1	1
R635			CARBON RES. 1/4W J 15K OHM	1	1	1	1	1	1	1
R636			CARBON RES. 1/4W J 6.8K OHM	1	1	1	1	1	1	1
R637			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R638			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R639			CARBON RES. 1/4W J 270 OHM	1	1	1	1	1	1	1
R640			CEMENT RES. 5W K 3.3K OHM	1	1	1	1	1	1	1
R641			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R642			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R643			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R644			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R645			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1
R646			CARBON RES. 1/4W J 47K OHM	1	1	1	1	1	1	1
R647			CARBON RES. 1/4W J 2.7K OHM	1	1	1	1	1	1	1
R648			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R649			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1

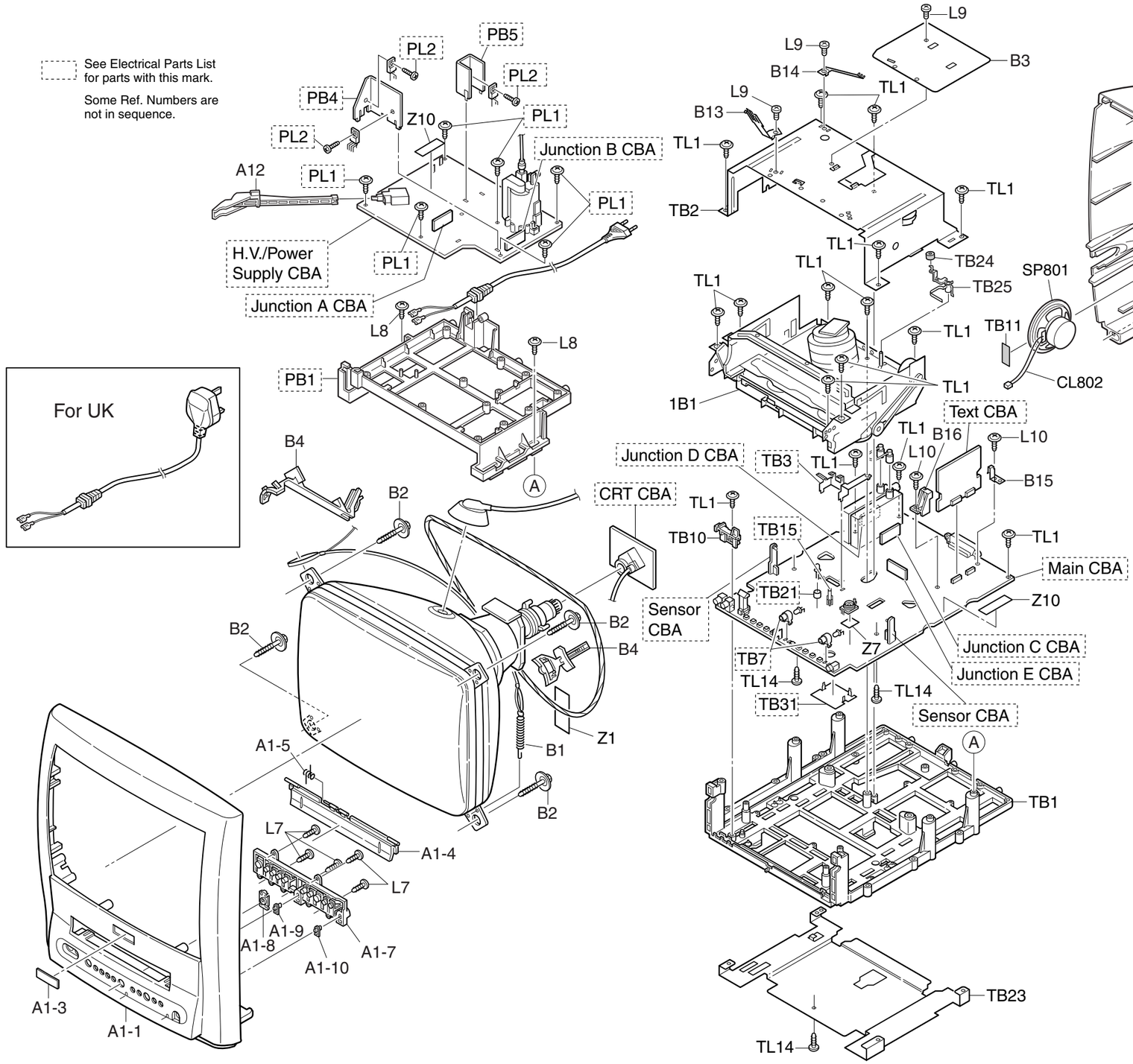
ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	**12 NC**	**Description**							
R650			CARBON RES. 1/4W J 56K OHM	1	1	1	1	1	1	1
R651			METAL OXIDE FILM RES. 2W J 680 OHM	1	1	1	1	1	1	1
R652			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R659			CARBON RES. 1/4W J 15 OHM	1	1	1	1	1	1	1
R660			CARBON RES. 1/4W J 390 OHM	1	1	1	1	1	1	1
R662			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R663			METAL OXIDE FILM RES. 2W J 33 OHM	1	1	1	1	1	1	1
R664			CARBON RES. 1/4W J 5.6K OHM	1	1	1	1	1	1	1
R668			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R669			ANTI-SURGE RESISTOR 1/2W J 3.3M OHM	1	1	1	1	1	1	1
R670			ANTI-SURGE RESISTOR 1/2W J 3.3M OHM	1	1	1	1	1	1	1
SA601	⚠	9965 000 13898	SURGE ABSORBER PVR-07D471KB	1	1	1	1	1	1	1
SW601	⚠	9965 000 13902	POWER SWITCH SDKVA30100	1	1	1	1	1	1	1
			TRANSISTORS							
T571		9965 000 13903	FLYBACK TRANS BSC21-2016S	1	1	1	1	1	1	1
T572		9965 000 13904	H0RIZONTAL DRIVE TRANS LP2-005	1	1	1	1	1	1	1
T601	⚠	9965 000 13905	SWITCHING TRANS 17711-S03	1	1	1	1	1	1	1
TM601	⚠		TAB 42018	1	1	1	1	1	1	1
TM602	⚠		TAB 42018	1	1	1	1	1	1	1
TP501			PCB JUMPER D0.6-P15.0	1	1	1	1	1	1	1
TP502			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1
TP503			PCB JUMPER D0.6-P7.5	1	1	1	1	1	1	1
TP504			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1
VR601		9965 000 13906	CARBON P.O.T. 10K OHM B	1	1	1	1	1	1	1
			CRT CBA	1	1	1	1	1	1	1
			CAPACITORS							
C501		9965 000 13907	CERAMIC CAP.(AX) B K 220PF/50V	1	1	1	1	1	1	1
C502		9965 000 13907	CERAMIC CAP.(AX) B K 220PF/50V	1	1	1	1	1	1	1
C503		9965 000 13907	CERAMIC CAP.(AX) B K 220PF/50V	1	1	1	1	1	1	1
C507		9965 000 13908	ELECTROLYTIC CAP. 1UF/50V M	1	1	1	1	1	1	1
C510		9965 000 13909	CERAMIC CAP. B K 1000PF/2KV	1	1	1	1	1	1	1
			CONNECTORS							
CL501A		9965 000 13910	LEAD WIRE 3P/280	1	1	1	1	1	1	1
CN501		9965 000 13911	PIN CONNECTOR 005P-5100	1	1	1	1	1	1	1
CN503		9965 000 13912	CONNECTOR BASE, 7P TUC-P07P-B1	1	1	1	1	1	1	1
CN504		9965 000 05247	CONNECTOR BASE 4P TUC-P04P-B1	1	1	1	1	1	1	1
JK501		9965 000 13913	CRT SOCKET ISMS01S	1	1	1	1	1	1	1
L501			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
L505		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1
			TRANSISTORS							
Q501		4822 130 60578	TRANSISTOR 2SC2482 TPE6	1	1	1	1	1	1	1
Q502		4822 130 60578	TRANSISTOR 2SC2482 TPE6	1	1	1	1	1	1	1
Q503		4822 130 60578	TRANSISTOR 2SC2482 TPE6	1	1	1	1	1	1	1
			RESISTORS							
R501			METAL OXIDE FILM RES. 1W J 15K OHM	1	1	1	1	1	1	1
R502			METAL OXIDE FILM RES. 1W J 15K OHM	1	1	1	1	1	1	1
R503			METAL OXIDE FILM RES. 1W J 15K OHM	1	1	1	1	1	1	1
R504			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R505			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R506			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R507			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R508			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R509			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R510			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R511			CARBON RES. 1/4W J 120K OHM	1	1	1	1	1	1	1
R512			CARBON RES. 1/4W J 120K OHM	1	1	1	1	1	1	1
R513			CARBON RES. 1/4W J 120K OHM	1	1	1	1	1	1	1
R514			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R515			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R516			CARBON RES. 1/4W J 15 OHM	1	1	1	1	1	1	1
R517			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R518			CARBON RES. 1/4W J 15 OHM	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	**⚠**	**12 NC**	**Description**							
R519			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
R520			CARBON RES. 1/4W J 15 OHM	1	1	1	1	1	1	1
R521			CARBON RES. 1/4W J 560 OHM	1	1	1	1	1	1	1
			JUNCTION D CBA	1	1	1	1	1	1	1
CN505		9965 000 05261	CONNECTOR 4P TUC-P04X-B1	1	1	1	1	1	1	1
CL505A		9965 000 13914	WIRE 250/BRO/AWG18#1007	1	1	1	1	1	1	1
			JUNCTION E CBA	1	1	1	1	1	1	1
CN506		9965 000 05261	CONNECTOR 4P TUC-P04X-B1	1	1	1	1	1	1	1
CL506		9965 000 13915	WIRE 240/BRO/AWG18#1007	1	1	1	1	1	1	1
			TEXT CBA							
			CAPACITORS							
C901			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C902			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C904			CERAMIC CAP.(AX) B K 100PF/50V	1	1	1	1	1	1	1
C905			STACKED FILM CAP. 0.47UF/50V J	1	1	1	1	1	1	1
C906			ELECTROLYTIC CAP. 22UF/16V M	1	1	1	1	1	1	1
C908			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C909			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C910			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C911			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C912			CERAMIC CAP.(AX) B K 330PF/50V	1	1	1	1	1	1	1
C914			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C915			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C916			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C917			CERAMIC CAP.(AX) SL J 33PF/50V	1	1	1	1	1	1	1
C918			CERAMIC CAP.(AX) SL J 33PF/50V	1	1	1	1	1	1	1
C919			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C920			CERAMIC CAP.(AX) Y N 0.022UF/6V	1	1	1	1	1	1	1
C921			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C922			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C923			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C924			ELECTROLYTIC CAP. 10UF/50V M	1	1	1	1	1	1	1
C925			ELECTROLYTIC CAP. 100UF/10V M	1	1	1	1	1	1	1
C926			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C927			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1
C928			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
C929			ELECTROLYTIC CAP. 100UF/10V M	1	1	1	1	1	1	1
C930			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1
CN901		9965 000 13916	CONNECTOR 8P TUC-P08X-B1	1	1	1	1	1	1	1
CN902		9965 000 13917	CONNECTOR, 6P TUC-P06X-B1	1	1	1	1	1	1	1
			DIODES							
D901			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D902			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D903			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D904			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
D908		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D909		9965 000 01155	ZENER DIODE MTZJT-773.9B	1	1	1	1	1	1	1
D910		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D911		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1
D912		4822 130 11629	ZENER DIODE MTZJT-776.8B	1	1	1	1	1	1	1
			IC's							
IC901		9965 000 13918	IC:TEXT 1PAGE ET-TVT031A	1	1	1	1	1	1	1
IC902		9965 000 13851	VOLTAGE REGULATOR KIA7805API	1	1	1	1	1	1	1
Q901		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
Q903		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1	1	1	1	1	1	1
Q904		9965 000 05643	TRANSISTOR 2SC2785(F)	1	1	1	1	1	1	1
			RESISTORS							
R901			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R902			CARBON RES. 1/4W J 2.2K OHM	1	1	1	1	1	1	1
R903			CARBON RES. 1/4W J 10K OHM	1	1	1	1	1	1	1
R904			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R905			CARBON RES. 1/4W J 4.7K OHM	1	1	1	1	1	1	1

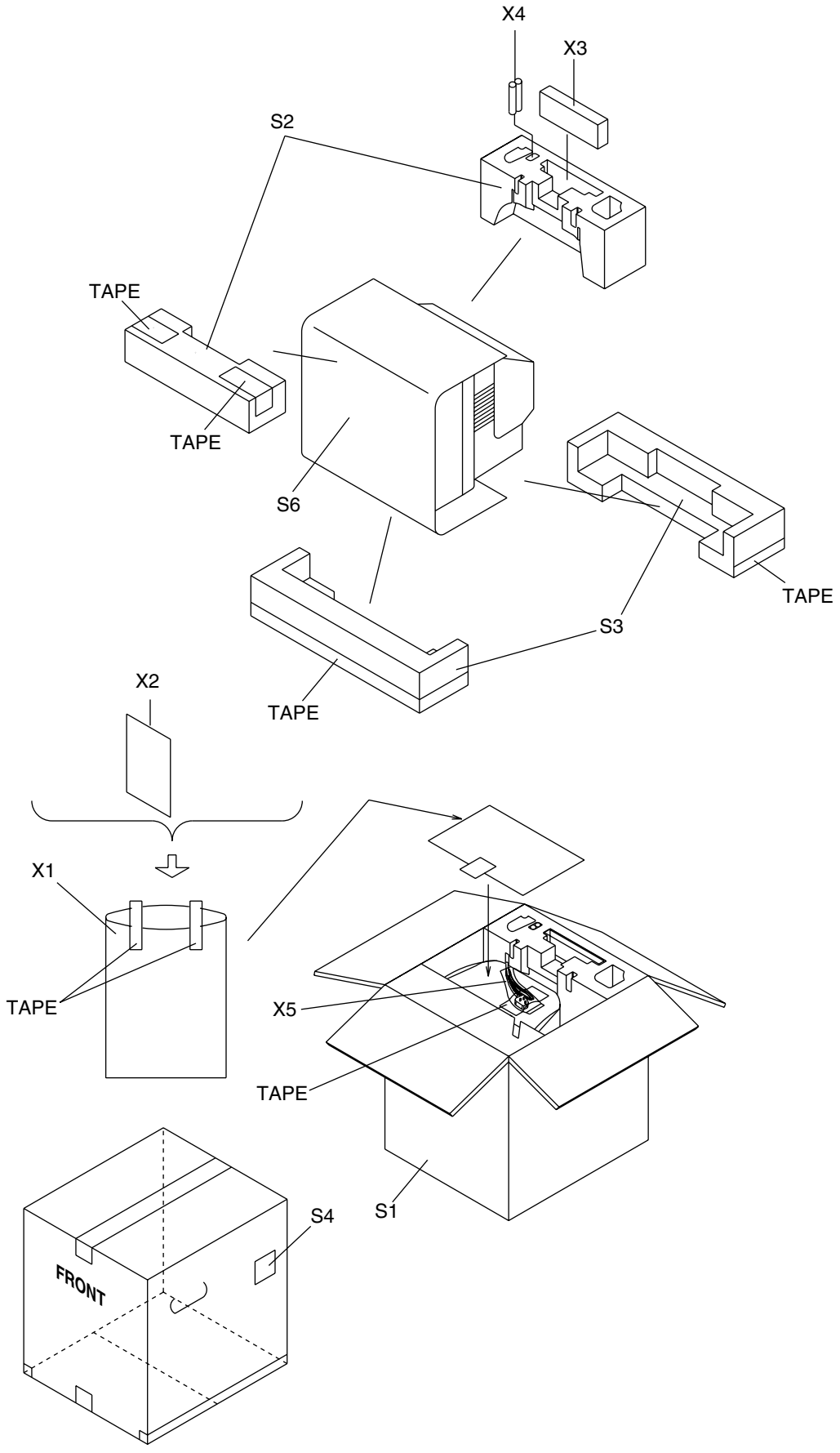
ELECTRICAL PARTS LIST				14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
Pos.	⚠	**12 NC**	**Description**							
R906			CARBON RES. 1/4W J 12K OHM	1	1	1	1	1	1	1
R907			CARBON RES. 1/4W J 12K OHM	1	1	1	1	1	1	1
R908			CARBON RES. 1/4W J 12K OHM	1	1	1	1	1	1	1
R913			CARBON RES. 1/4W J 1.5K OHM	1	1	1	1	1	1	1
R914			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R915			CARBON RES. 1/4W J 150 OHM	1	1	1	1	1	1	1
R916			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R917			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R919			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R920			CARBON RES. 1/4W J 100K OHM	1	1	1	1	1	1	1
R921			CARBON RES. 1/4W J 47 OHM	1	1	1	1	1	1	1
R922			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R923			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
R930			CARBON RES. 1/4W J 100 OHM	1	1	1	1	1	1	1
R931			CARBON RES. 1/4W J 150 OHM	1	1	1	1	1	1	1
R932			CARBON RES. 1/4W J 15K OHM	1	1	1	1	1	1	1
R933			CARBON RES. 1/4W J 15K OHM	1	1	1	1	1	1	1
R934			CARBON RES. 1/4W J 15K OHM	1	1	1	1	1	1	1
R936			CARBON RES. 1/4W J 220 OHM	1	1	1	1	1	1	1
R937			CARBON RES. 1/4W J 22K OHM	1	1	1	1	1	1	1
R940			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1
X901		9965 000 13919	X'TAL :13.875MHZ CSA-309	1	1	1	1	1	1	1

EXPLODED VIEWS

Cabinet



Packing



PRODUCT SAFETY NOTE: Products marked with a ▲

have special characteristics important to safety.
Before replacing any of these components, read carefully
the product safety notice in this service manual.
Don't degrade the safety of the product through improper servicing.

***)Note:**

Pos.1 consists of

A1-1	A1-8
A1-3	A1-9
A1-4	A1-10
A1-5	L7
A1-7	

MECHANICAL PARTS LIST

Pos.	Pos. Exploded View	▲	12 NC	Description	14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
1	*)		3143 027 60061	FRONT ASSY 14PV360/07		1					
1	*)		3143 027 60101	FRONT ASSY 14PV365/39						1	
1	*)		3143 027 60071	FRONT ASSY 14PV360/39			1				
1	*)		3143 027 60011	FRONT ASSY 14PV360/01	1						
1	*)		3143 027 60081	FRONT ASSY 14PV365/01/58				1			1
1	*)		3143 027 60091	FRONT ASSY 14PV365/07					1		
1	A1-1			FRONT CAB (A) GR PH001	1	1	1	1	1	1	1
11	A1-3			WORDMARK PHILIPS	1	1	1				
11	A1-3			WORDMARK PHILIPS				1	1	1	1
5	A1-4			CASSETTE DOOR (A) GR PH001	1	1	1	1	1	1	1
6	A1-5			LEG SPRING	1	1	1	1	1	1	1
7	A1-8			LED LENS A (C)	1	1	1	1	1	1	1
8	A1-9			LED LENS A (R)	1	1	1	1	1	1	1
10	L7			SCR PAN TORX TAP ST ZN BK 3X10	1	1	1	1	1	1	1
9			3143 027 50181	FUNCTION KNOB (A) GR PH001	1	1	1	1	1	1	1
31	B15		3143 021 20021	TE HOLDER	1	1	1	1	1	1	1
55	L1			SCREW	1	1	1	1	1	1	1
56	L2			PAN HEAD TAPPING SCREW M4X12	1	1	1	1	1	1	1
59	TL1			SCR PAN TORX TAP ST ZN BK 3X10	1	1	1	1	1	1	1
70	A2		3143 027 50131	REAR CAB PH001	1	1	1				
70	A2		3143 027 50031	REAR CAB PH003				1	1	1	1
71	A12		3143 027 50121	POWER BUTTON PH003				1	1	1	1
71	A12		3143 027 50191	POWER BUTTON PH001	1	1	1				
1010	consists of SP801/CL802		3143 027 10091	SPEAKER ASSY	1	1	1	1	1	1	1
CL802			see 1010	WIRE ASSEMBLY (SPEAKER) 2P/200	1	1	1	1	1	1	1
SP801			see 1010	SPEAKER S08F02B or	1	1	1	1	1	1	1
2	B4		4822 402 10174	BRACKET ==>14"	1	1	1	1	1	1	1
4	B1		3143 021 20031	TENSION SPRING	1	1	1	1	1	1	1
30	B3			SCREENING	1	1	1	1	1	1	1
54	B2			SCREW ===>CRT	1	1	1	1	1	1	1
57	L8			FLAT HEAD SCREW 4X18	1	1	1	1	1	1	1

MECHANICAL PARTS LIST

Pos.	Pos. Exploded View	▲	12 NC	Description	14PV360/01	14PV360/07	14PV360/39	14PV365/01	14PV365/07	14PV365/39	14PV365/58
58	TL1			SHIELD PLATE SCREW M3X4	1	1	1	1	1	1	1
60	B13			GROUND PLATE CRT	1	1	1	1	1	1	1
61			3143 021 20071	EARTH SPRING (TU)	1	1	1	1	1	1	1
1B1				DECK ASSEMBLY CZD011/VM15A6	1	1	1	1	1	1	1
TB1				TRAY CHASSIS T6300RA	1	1	1	1	1	1	1
TB2				TOP COVER T6300RA	1	1	1	1	1	1	1
TB10			9965 000 13833	RCA HOLDER T6300RA	1	1	1	1	1	1	1
TB11				CLOTH(10X30XT0.5) B5900UA	1	1	1	1	1	1	1
TB23				BOTTOM PLATE T6300RA	1	1	1	1	1	1	1
TL1			9965 000 08646	SCREW, P-TIGHT 3X12 WASHER HEAD+	1	1	1	1	1	1	1
TL14			9965 000 12171	SCREW, B-TIGHT M3X8 BIND HEAD+	1	1	1	1	1	1	1
				PACKING							
450	S1			BOX FOLDED 14PV36X	1	1	1	1	1	1	1
451				TAPE S-ADH PP TP 0.038X75MM	1	1	1	1	1	1	1
452	S6			PE-PLATE	1	1	1	1	1	1	1
453	S2			STYROFOAM TOP A	1	1	1	1	1	1	1
454	S3			STYROFOAM BOTTOM A	1	1	1	1	1	1	1
455	X1			BAG (==>MAINS CORD)	1	1	1	1	1	1	1
150			3143 028 50031	Remote Control RT722/111	1	1	1	1	1	1	1
				TEST TAPES							
1			3143 023 20011	TEST TAPE FL6K(S) / for verifying the audio frequency response	1	1	1	1	1	1	1
2			3143 023 20021	TEST TAPE FL6NS8	1	1	1	1	1	1	1
4			3143 023 20041	TEST TAPE FL6M / for verifying the wow & flutter	1	1	1	1	1	1	1

DECK MECHANISM SECTION

TV-VCR COMBINATION

Sec. 2: Deck Mechanism Section

- **Standard Maintenance**
- **Mechanism Alignment Procedures**
- **Disassembly / Assembly of Mechanism**
- **Deck Exploded Views**
- **Deck Parts List**

TABLE OF CONTENTS

STANDARD MAINTENANCE 2-1-1
SERVICE FIXTURE AND TOOLS 2-2-1
MECHANICAL ALIGNMENT PROCEDURES 2-3-1
DISASSEMBLY / ASSEMBLY PROCEDURES OF DECK MECHANISM 2-4-1
ALIGNMENT PROCEDURES OF MECHANISM 2-4-9
DECK EXPLODED VIEWS 2-5-1
DECK PARTS LIST 2-6-1

STANDARD MAINTENANCE

Service Schedule of Components

H: Hours ❍: Check ●: Change

Deck		Periodic Service Schedule			
Ref.No.	**Part Name**	**1,000 H**	**2,000 H**	**3,000 H**	**4,000 H**
B2	Cylinder Assembly	❍	●	❍	●
B3	Loading Motor Assembly			●	
B8	Pulley Assembly		●		●
B27	Tension Lever Sub Assembly		●		●
B31	AC Head Assembly			●	
B573,B574	Reel S, Reel T			●	
B37	Capstan Motor		●		●
B52	Cap Belt		●		●
*B73	FE Head			●	
B133	Idler Assembly		●		●
B410	Pinch Arm (A) Assembly		●		●
B414	M Brake S Assembly		●		●
B416	M Brake T Assembly		●		●
B525	LDG Belt		●		●

Notes:

1. Clean all parts for the tape transport (Upper Drum with Video Head / Pinch Roller / Audio Control Head / Full Erase Head) using 90% Isopropyl Alcohol.
2. After cleaning the parts, do all DECK ADJUSTMENTS.
3. For the reference numbers listed above, refer to Deck Exploded Views.

* B73 ------ Recording Model only

Cleaning

Cleaning of Video Head

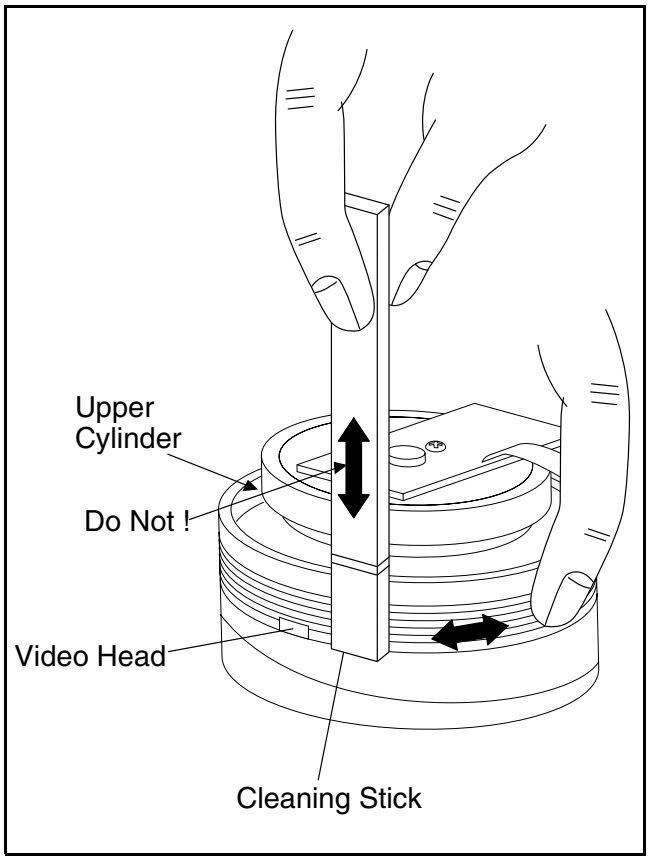
Clean the head with a head cleaning stick or chamois cloth.

Procedure

1. Remove the top cabinet.
2. Put on a glove (thin type) to avoid touching the upper and lower drum with your bare hand.
3. Put a few drops of 90% Isopropyl alcohol on the head cleaning stick or on the chamois cloth and, by slightly pressing it against the head tip, turn the upper drum to the right and to the left.

Notes:

1. The video head surface is made of very hard material, but since it is very thin, avoid cleaning it vertically.
2. Wait for the cleaned part to dry thoroughly before operating the unit.
3. Do not reuse a stained head cleaning stick or a stained chamois cloth.



Cleaning of Audio Control Head

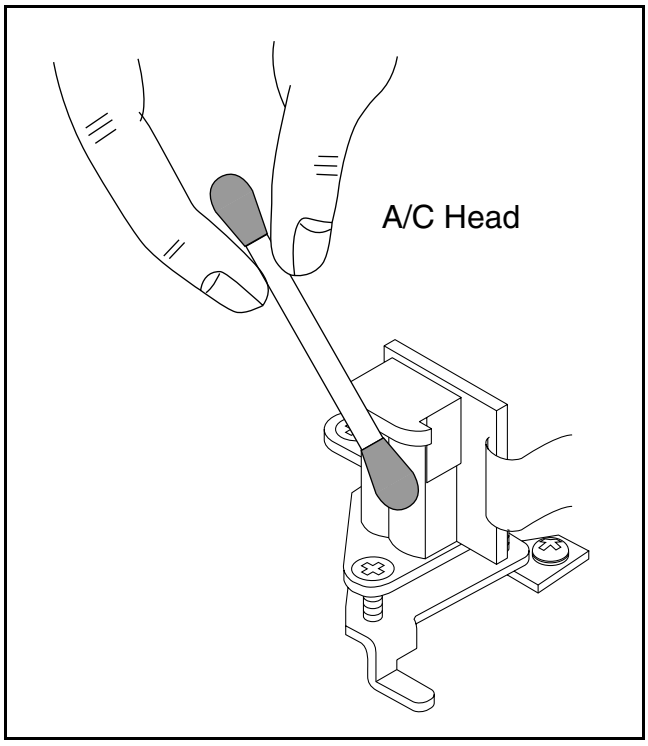
Clean the head with a cotton swab.

Procedure

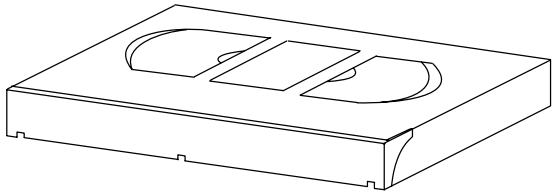
1. Remove the top cabinet.
2. Dip the cotton swab in 90% isopropyl alcohol and clean the audio control head. Be careful not to damage the upper drum and other tape running parts.

Notes:

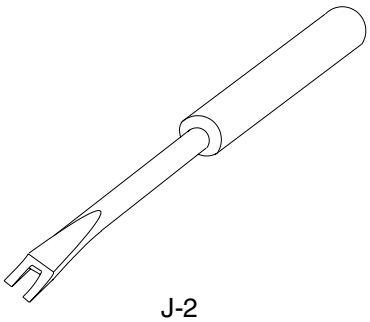
1. Avoid cleaning the audio control head vertically.
2. Wait for the cleaned part to dry thoroughly before operating the unit or damage may occur.



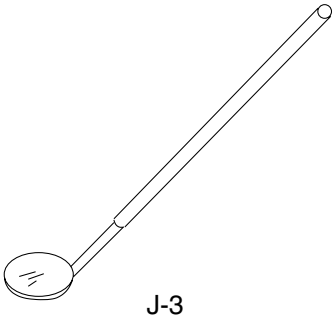
SERVICE FIXTURE AND TOOLS



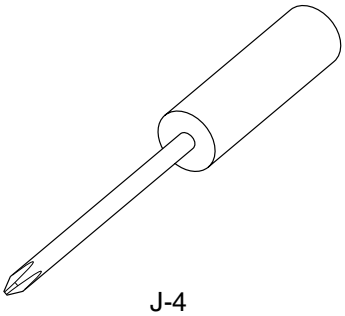
J-1-1, J-1-2



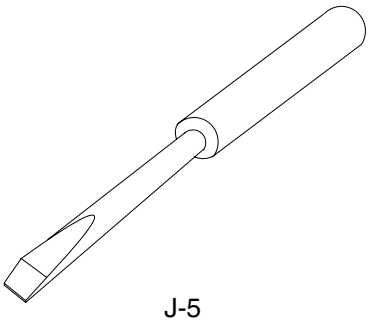
J-2



J-3



J-4



J-5

Screws S1 can be cross slot or torx 10. In case of torx please use screw driver: 4822 395 50423.

Ref. No.	Name	Part No.	Adjustment
J-1-1	Alignment Tape	FL6A	Electrical Adjustments
J-1-2	Alignment Tape	FL6NS8	Azimuth and X Value Adjustment of Audio Control Head / Adjustment of Envelope Waveform
J-2	Guide Roller Adj.Screwdriver	Available Locally	Guide Roller
J-3	Mirror	Available Locally	Tape Transportation Check
J-4	Azimuth Adj.Screwdriver +	Available Locally	A/C Head Height
J-5	X Value Adj.Screwdriver -	Available Locally	X Value

MECHANICAL ALIGNMENT PROCEDURES

Explanation of alignment for the tape to correctly run starts on the next page. Refer to the information below on this page if a tape gets stuck, for example, in the mechanism due to some electrical trouble of the unit.

Service Information

A. Method for Manual Tape Loading/Unloading

To load a cassette tape manually:

1. Disconnect the AC plug.
2. Remove the Top Case and Front Assembly.
3. Insert a cassette tape. Though the tape will not be automatically loaded, make sure that the cassette tape is all the way in at the inlet of the Cassette Holder. To confirm this, lightly push the cassette tape further in and see if the tape comes back out, by a spring motion, just as much as you have pushed in.
4. Turn the LDG Belt in the appropriate direction shown in Fig. M1 for a minute or two to complete this task.

To unload a cassette tape manually:

1. Disconnect the AC plug.
2. Remove the Top Case and Front Assembly.
3. Make sure that the Moving guide preparations are in the Eject Position.
4. Turn the LDG Belt in the appropriate direction shown in Fig. M1 until the Moving guide preparations come to the Eject Position. Stop turning when the preparations begin clicking or can not be moved further. However, the tape will be left wound around the cylinder.
5. Turn the LDG Belt in the appropriate direction continuously, and the cassette tape will be ejected. Allow a minute or two to complete this task.

B. Method to place the Cassette Holder in the tape-loaded position without a cassette tape

1. Disconnect the AC Plug.
2. Remove the Top Case and Front Assembly.
3. Turn the LDG Belt in the appropriate direction shown in Fig. M1. Release the locking tabs shown in Fig. M1 and continue turning the LDG Belt until the Cassette Holder comes to the tape-loaded position. Allow a minute or two to complete this task.

Top View

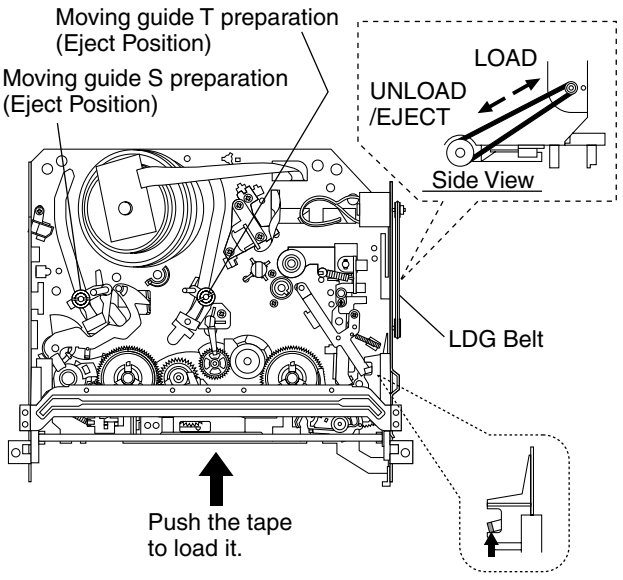


Fig. M1

Bottom View

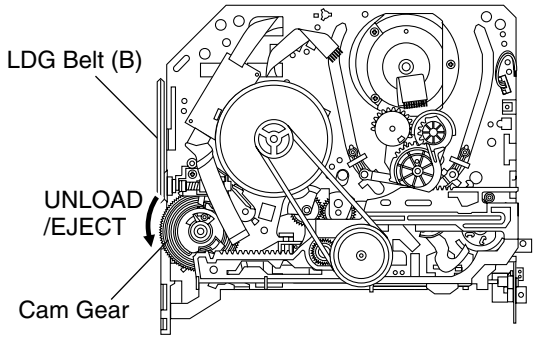


Fig. M2

1.Tape Interchangeability Alignment

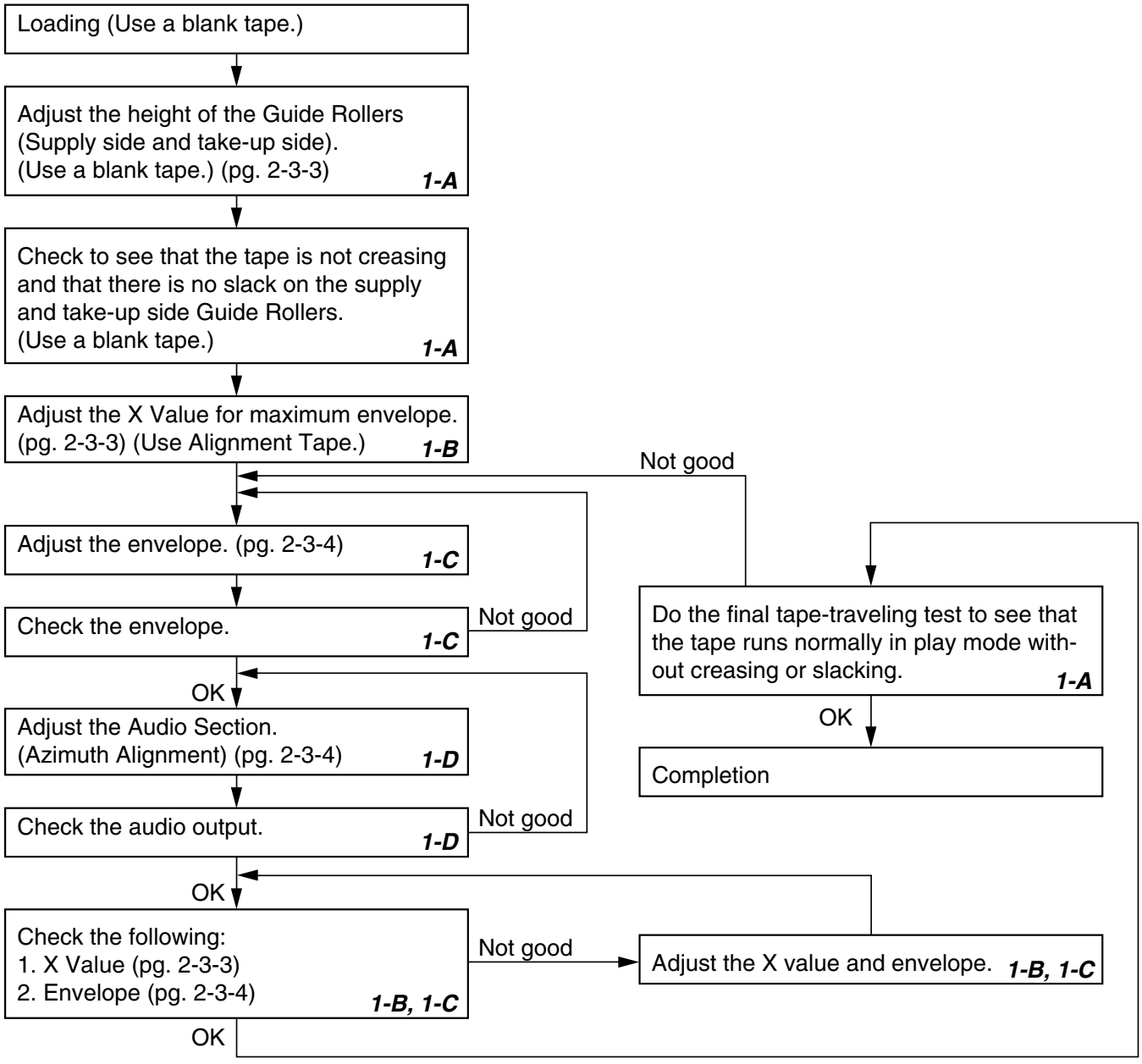
Note:
To do these alignment procedures, make sure that the Tracking Control Circuit is set to the center position every time a tape is loaded or unloaded. (Refer to page 2-3-4, procedure 1-C, step 2.)

Equipment required:

Dual Trace Oscilloscope
VHS Alignment Tape
FL6NS8
Guide Roller Adj. Screwdriver
X-Value Adj. Screwdriver

Note: Before starting this Mechanical Alignment, do all Electrical Adjustment procedures.

Flowchart of Alignment for tape traveling


Loading (Use a blank tape.)
Adjust the height of the Guide Rollers (Supply side and take-up side). (Use a blank tape.) (pg. 2-3-3) 1-A
Check to see that the tape is not creasing and that there is no slack on the supply and take-up side Guide Rollers. (Use a blank tape.) 1-A
Adjust the X Value for maximum envelope. (pg. 2-3-3) (Use Alignment Tape.) 1-B
Not good
Adjust the envelope. (pg. 2-3-4) 1-C
Check the envelope. 1-C
Not good
OK
Adjust the Audio Section. (Azimuth Alignment) (pg. 2-3-4) 1-D
Check the audio output. 1-D
Not good
OK
Check the following:
1. X Value (pg. 2-3-3)
2. Envelope (pg. 2-3-4) 1-B, 1-C
Not good
Adjust the X value and envelope. 1-B, 1-C
OK
Do the final tape-traveling test to see that the tape runs normally in play mode without creasing or slacking. 1-A
OK
Completion

1-A. Preliminary/Final Checking and Alignment of Tape Path

Purpose:

To make sure that the tape path is well stabilized.

Symptom of Misalignment:

If the tape path is unstable, the tape will be damaged.

Note: Do not use an Alignment Tape for this procedure. If the unit is not correctly aligned, the tape may be damaged.

1. Playback a blank cassette tape and check to see that the tape runs without creasing at Guide Rollers [2] and [3], and at points A and B on the lead surface. (Refer to Fig M3 and M4.)
2. If creasing is apparent, align the height of the guide rollers by turning the top of Guide Rollers [2] and [3] with a Guide Roller Adj. Screwdriver. (Refer to Fig. M3 and M5.)

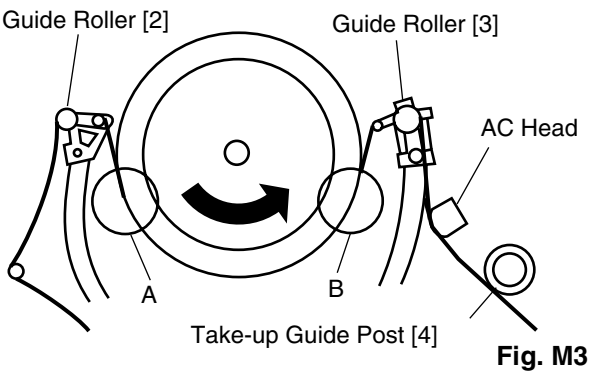


Fig. M3

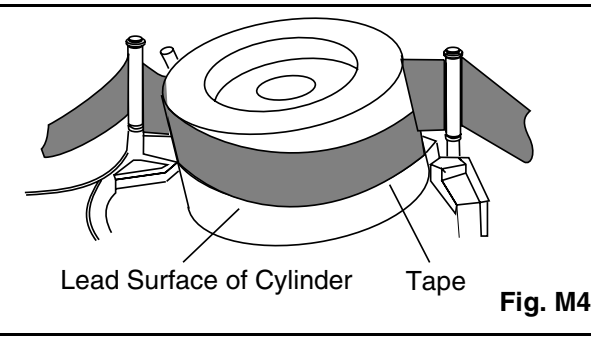


Fig. M4

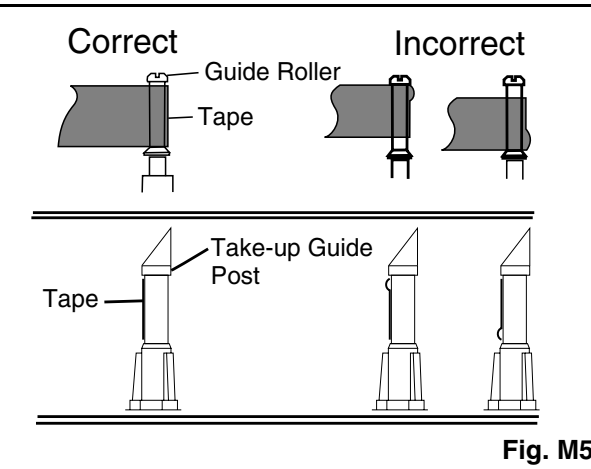


Fig. M5

3. Check to see that the tape runs without creasing at Take-up Guide Post [4] or without snaking between Guide Roller [3] and AC Head. (Fig. M3 and M5)
4. If creasing or snaking is apparent, adjust the Tilt Adj. Screw of the AC Head. (Fig. M6)

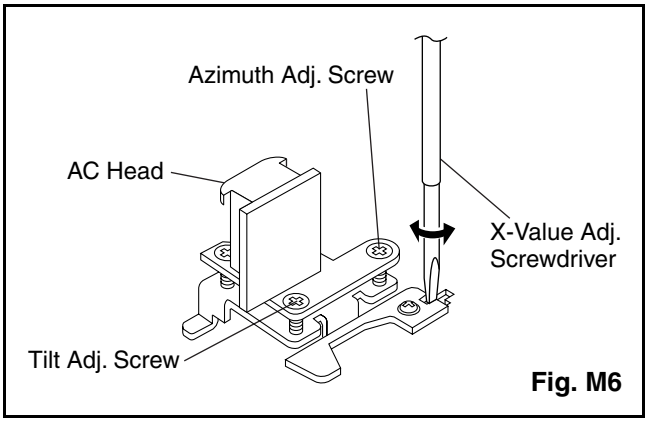


Fig. M6

1-B. X Value Alignment

Purpose:

To align the Horizontal Position of the Audio/Control/Erase Head.

Symptom of Misalignment:

If the Horizontal Position of the Audio/Control/Erase Head is not properly aligned, maximum envelope cannot be obtained at the Neutral position of the Tracking Control Circuit.

1. Connect the oscilloscope to TP004 (CPB) and TP001 (CTL) on the Main CBA. Use TP002 (RF-SW) as a trigger.
2. Playback the Gray Scale of the Alignment Tape (FL6NS8)
   and confirm that the PB FM signal is present.
3. Set the Tracking Control Circuit to the center position by pressing CH UP button then " PLAY " button on the unit. (Refer to note on bottom of page 2-3-4.)
4. Use the X-Value Adj. Screwdriver so that the PB FM signal at TP004 (CPB) is maximum. (Fig. M6)
5. Press CH UP button on the unit until the CTL waveform has shifted by approx. +2msec. Make sure that the envelope is simply attenuated (shrinks in height) during this process so that you will know the envelope has been at its peak.

6. Press CH DOWN button on the unit until the CTL waveform has shifted from its original position (not the position achieved in step 5, but the position of CTL waveform in step 4) by approximately -2msec. Make sure that the envelope is simply attenuated (shrinks in height) once CTL waveform passes its original position and is further brought in the minus direction.
7. Set the Tracking Control Circuit to the center position by pressing CH UP button and then " PLAY " button.

1-C. Checking/Adjustment of Envelope Waveform

Purpose:

To achieve a satisfactory picture and precise tracking.

Symptom of Misalignment:

If the envelope output is poor, noise will appear in the picture. The tracking will then lose precision and the playback picture will be distorted by any slight variation of the Tracking Control Circuit.

1. Connect the oscilloscope to TP004 (CPB) on the Main CBA. Use TP002 (RF-SW) as a trigger.
2. Playback the Gray Scale on the Alignment Tape (FL6NS8).
   Set the Tracking Control Circuit to the center position by pressing CH UP button and then " PLAY " button on the unit. Adjust the height of Guide Rollers [2] and [3] (Fig. M3, Page 2-3-3) watching the oscilloscope display so that the envelope becomes as flat as possible. To do this adjustment, turn the top of the Guide Roller with the Guide Roller Adj. Screwdriver.
3. If the envelope is as shown in Fig. M7, adjust the height of Guide Roller [2] (Refer to Fig. M3) so that the waveform looks like the one shown in Fig. M9.
4. If the envelope is as shown in Fig. M8, adjust the height of Guide Roller [3] (Refer to Fig. M3) so that the waveform looks like the one shown in Fig. M9.
5. When Guide Rollers [2] and [3] (Refer to Fig.M3) are aligned properly, there is no envelope drop either at the beginning or end of track as shown in Fig. M9.

Note: Upon completion of the adjustment of Guide Rollers [2] and [3] (Refer to Fig. M3), check the X Value by pushing the CH UP or DOWN buttons alternately, to check the symmetry of the envelope. Check the number of pushes to ensure center position. The number of pushes CH UP button to achieve 1/2 level of envelope should match the number of pushes CH DOWN button from center. If required, redo the "X Value Alignment."

1-D. Azimuth Alignment of Audio/Control/ Erase Head

Purpose:

To correct the Azimuth alignment so that the Audio/ Control/Erase Head meets tape tracks properly.

Symptom of Misalignment:

If the position of the Audio/Control/Erase Head is not properly aligned, the Audio S/N Ratio or Frequency Response will be poor.

1. Connect the oscilloscope to the audio output jack on the rear side of the deck.
2. Playback the alignment tape (FL6NS8) and confirm that the audio signal output level is 6kHz.
3. Adjust Azimuth Adj. Screw so that the output level on the AC Voltmeter or the waveform on the oscilloscope is at maximum. (Fig. M6)

Dropping envelope level at the beginning of track.

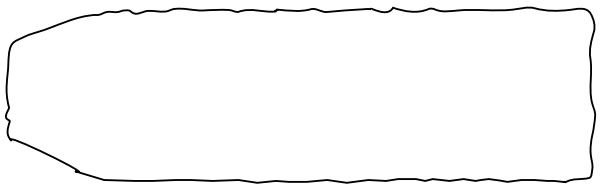


Fig. M7

Dropping envelope level at the end of track.

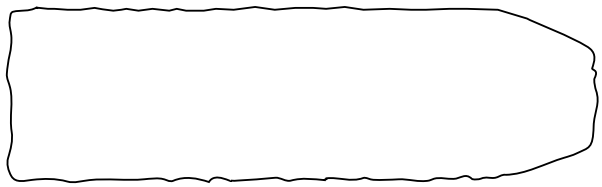


Fig. M8

Envelope is adjusted properly. (No envelope drop)

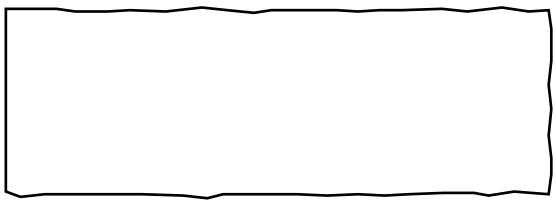


Fig. M9

DISASSEMBLY/ASSEMBLY PROCEDURES OF DECK MECHANISM

Before following the procedures described below, be sure to remove the deck assembly from the cabinet. (Refer to CABINET DISASSEMBLY INSTRUCTIONS on page 1-5-1.)
All the following procedures, including those for adjustment and replacement of parts, should be done in Eject mode; see the positions of [45] and [46] in Fig.DM1 on page 2-4-3. When reassembling, follow the steps in reverse order.

STEP /LOC. No.	START-ING No.	PART		REMOVAL		INSTALLATION
				Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	ADJUSTMENT CONDITION
[1]	[1]	Guide Holder A	T	DM3	2(S-1)	
[2]	[1]	Cassette Holder Assembly	T	DM4		
[3]	[2]	Slider L	T	DM5	(S-2)	
[4]	[2]	Slider R	T	DM5	(S-3)	
[5]	[4]	Lock Lever	T	DM5	(S-4),*(P-1)	
[6]	[2]	C Plate	T	DM5		
[7]	[7]	Cylinder Assembly	T	DM1,DM6	Desolder, 3(S-5)	
[8]	[8]	Loading Motor Assembly	T	DM1,DM7	Desolder, LDG Belt, 2(S-6)	
[9]	[9]	AC Head Assembly	T	DM1,DM7	(S-7)	
[10]	[2]	Tape Guide Assembly	T	DM1,DM8	*(P-2)	
[11]	[10]	Door Opener B	T	DM1,DM8	*(L-1),*(L-2)	
[12]	[11]	Pinch Arm (B)	T	DM1,DM8	*(P-3)	
[13]	[12]	Pinch Arm (A) Assembly	T	DM1,DM8		
[14]	[14]	FE Head	T	DM1,DM9	(S-9)	
[15]	[15]	Prism	T	DM1,DM9	(S-10)	
[16]	[2]	Slider Shaft	T	DM10	(S-11),*(L-3)	
[17]	[16]	C Drive Lever L	T	DM10		
[18]	[16]	C Drive Lever R	T	DM10		
[19]	[7],[10]	Capstan Motor	B	DM2,DM11	3(S-12), Cap Belt	
[20]	[20]	Clutch Assembly(HI)	B	DM2,DM12	(C-1)	
[21]	[20]	Center Gear	B	DM12		
[22]	[22]	Cam Holder F	B	DM2,DM13	(C-2)	
[23]	[22]	Cam Gear (B)	B	DM2,DM13	(C-3),*(P-4)	
[24]	[24]	Mode Gear	B	DM2,DM14	(C-4)	
[25]	[20],[23], [24]	Mode Lever(HI)	B	DM2,DM14	(C-5), *(L-4)	
[26]	[22]	Worm Holder	B	DM2,DM14	(S-15)	
[27]	[26]	Pulley Assembly	B	DM2,DM14		
[28]	[22],[25]	Cam Gear (A)	B	DM2,DM14		(+)Refer to Alignment Sec.Pg.2-4-10
[29]	[20]	TR Gear C	B	DM2,DM14	(C-6)	
[30]	[29]	TR Gear Spring	B	DM14		
[31]	[30]	TR Gear A/B	B	DM1,DM14		
[32]	[31]	FF Arm(HI)	B	DM1,DM14		
[33]	[21],[25]	Idler Assembly(HI)	B	DM1,DM15	*(L-5)	
[34]	[25]	BT Arm	B	DM2,DM15	*(P-5)	

STEP /LOC. No.	START-ING No.	PART		REMOVAL		INSTALLATION
				Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	ADJUSTMENT CONDITION
[35]	[25]	Loading Arm S(B) Assembly	B	DM2,DM15		(+)Refer to Alignment Sec.Pg.2-4-9
[36]	[35]	Loading Arm T(B) Assembly	B	DM2,DM15		(+)Refer to Alignment Sec.Pg.2-4-9
[37]	[2],[25]	M Brake T(HI) Assembly	T	DM1,DM16	*(P-6)	
[38]	[2],[25]	M Brake S(HI) Assembly	T	DM1,DM16	*(P-7)	
[39]	[38]	Tension Lever Sub Assembly	T	DM1,DM16		
[40]	[39]	T Lever Holder	T	DM1,DM16	*(L-6)	
[41]	[2]	M Gear(HYT)	T	DM1,DM16	(C-7)	
[42]	[2],[15]	Sensor Gear	T	DM1,DM16	(C-8)	
[43]	[37],[41]	Reel T	T	DM1,DM16		
[44]	[39]	Reel S	T	DM1,DM16		
[45]	[35],[38]	Moving Guide S Preparation	T	DM1,DM17		
[46]	[36]	Moving Guide T Preparation	T	DM1,DM17		
[47]	[19]	TG Post Assembly	T	DM1,DM17	*(L-7)	
[48]	[18],[28]	Rack Assembly	R	DM18		(+)Refer to Alignment Sec.Pg.2-4-10
[49]	[48]	F Door Opener	R	DM18	*(P-8)	
[50]	[50]	Cleaner Lever Assembly	T	DM1,DM6		Type A
					*(L-8)	Type B
[51]	[50]	CL Post	T	DM6	*(L-9)	Type A
↓ (1)	↓ (2)	↓ (3)	↓ (4)	↓ (5)	↓ (6)	↓ (7)

(1): Follow steps in sequence. When reassembling, follow the steps in reverse order.
These numbers are also used as identification (location) No. of parts in the figures.

(2): Indicates the part to start disassembling with in order to disassemble the part in column (1).

(3): Name of the part

(4): Location of the part: T=Top B=Bottom R=Right L=Left

(5): Figure Number

(6): Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
P=Spring, W=Washer, C=Cut Washer, S=Screw, *=Unhook, Unlock, Release, Unplug, or Desolder
e.g., 2(L-2) = two Locking Tabs (L-2).

(7): Adjustment Information for Installation
(+):Refer to Deck Exploded Views for lubrication.

Top View

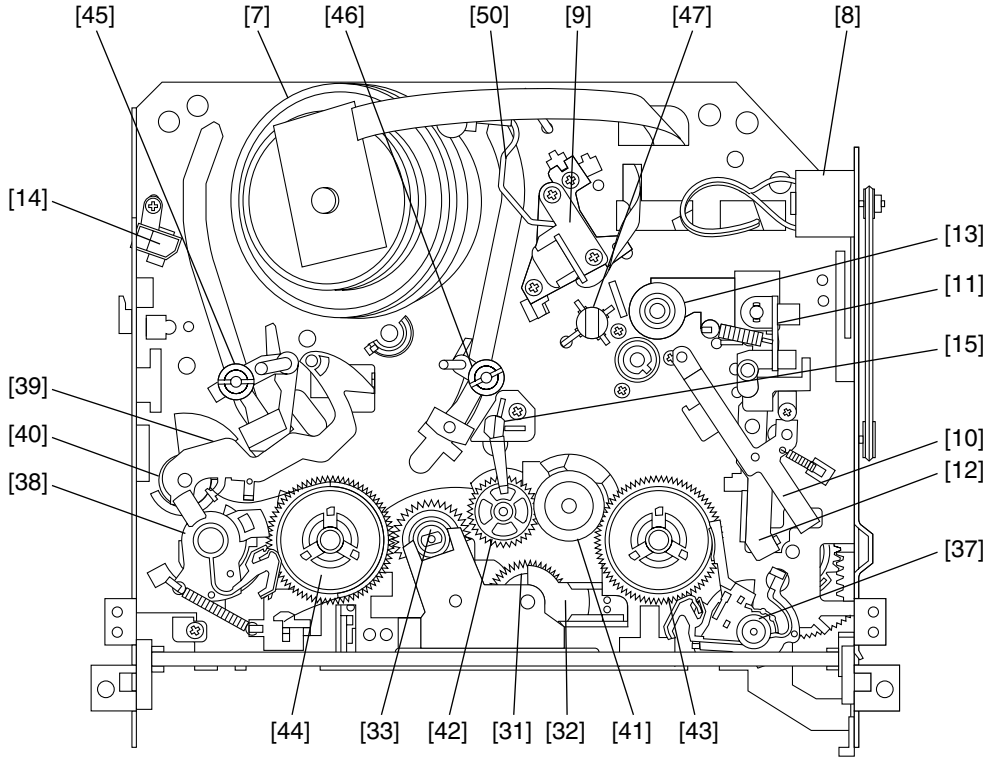


Fig. DM1

Bottom View

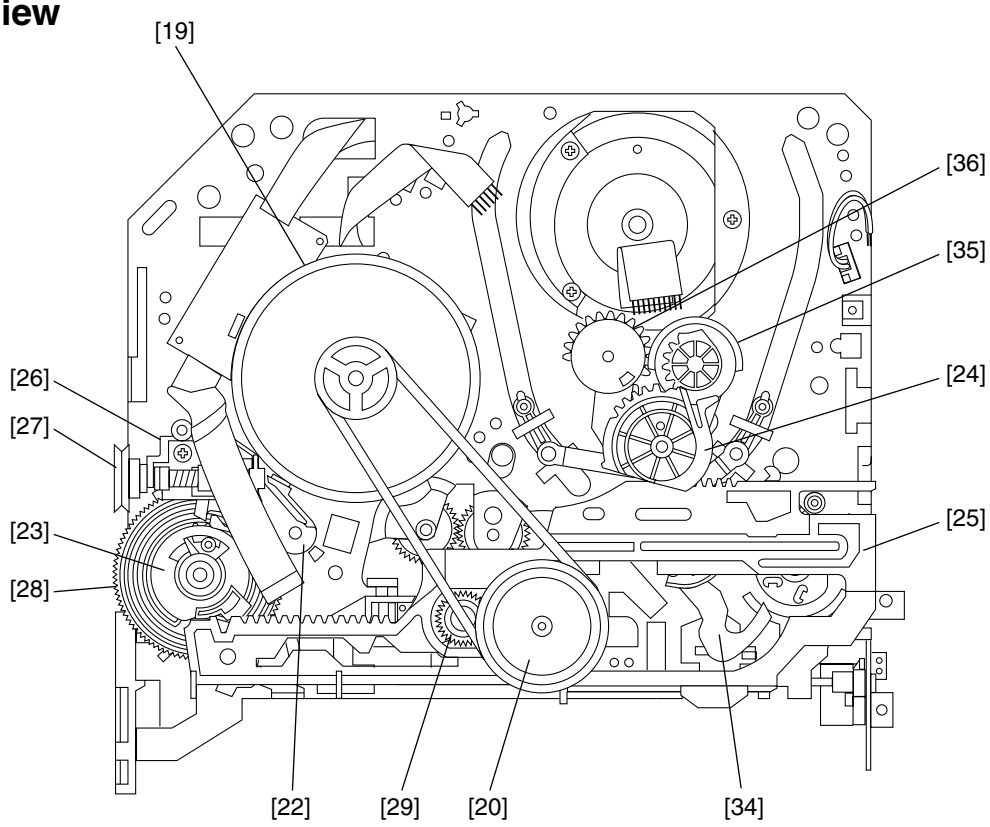


Fig. DM2

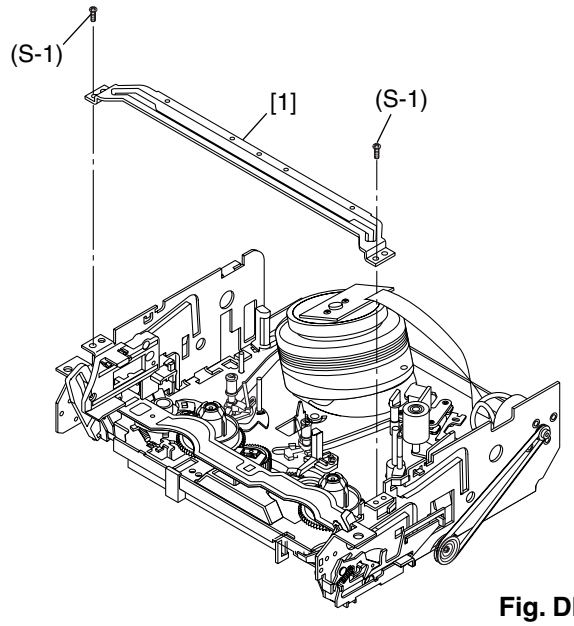


Fig. DM3

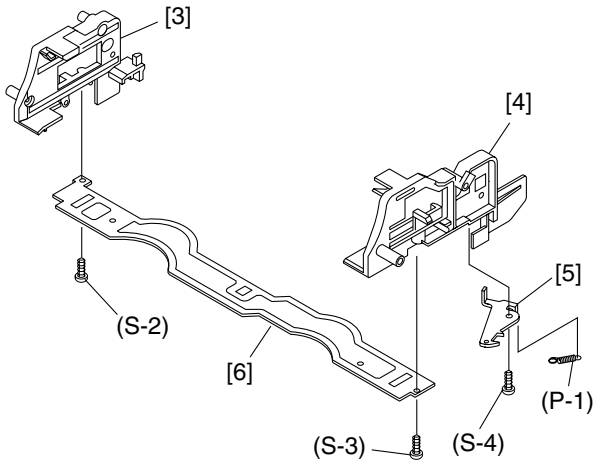
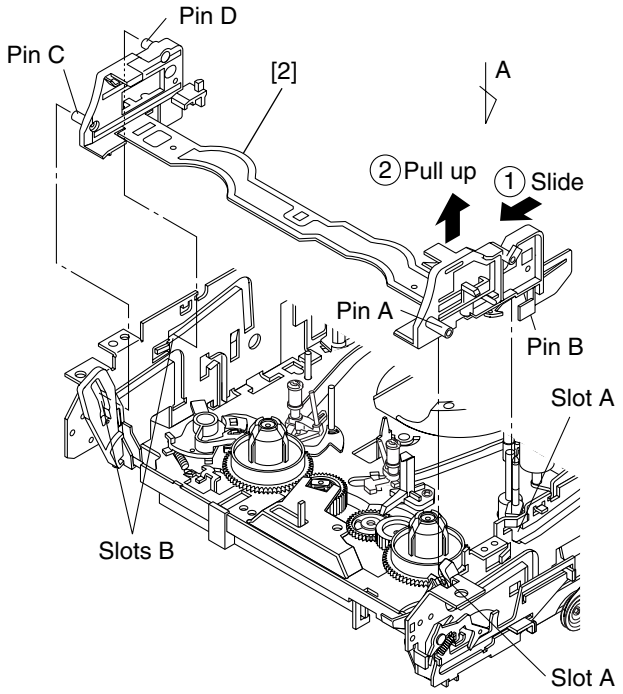


Fig. DM5



First, while pushing the locking tab as shown in the right, slide and pull up the right side on [2] to release Pin A and Pin B from the slots A.
Then, remove Pin C and Pin D on [2] from the slots B as shown.

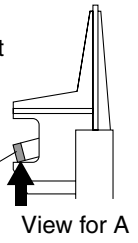
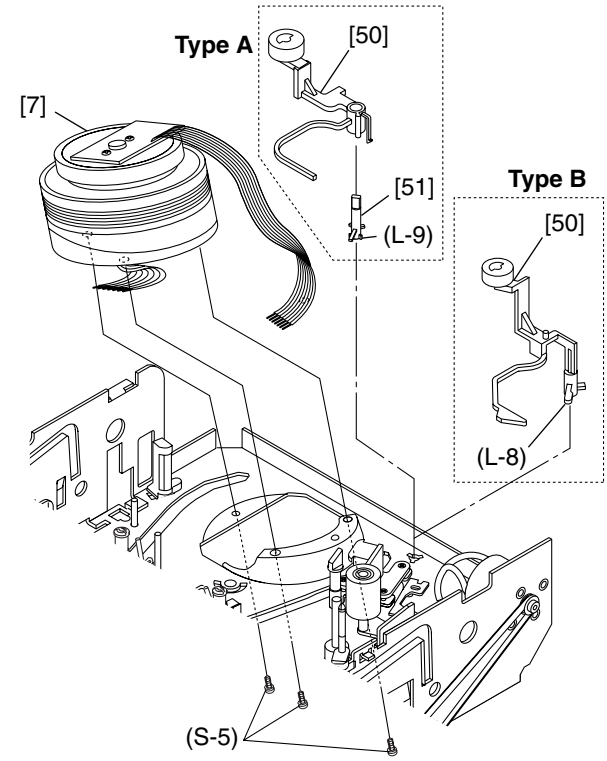


Fig. DM4



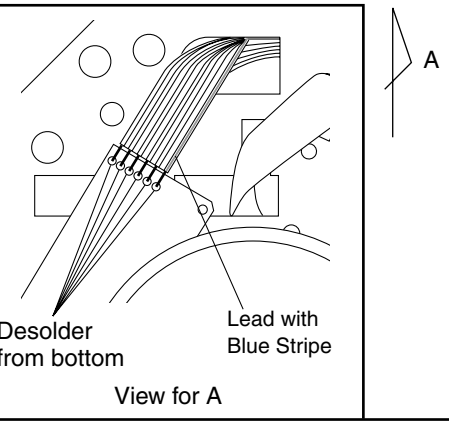


Fig. DM6

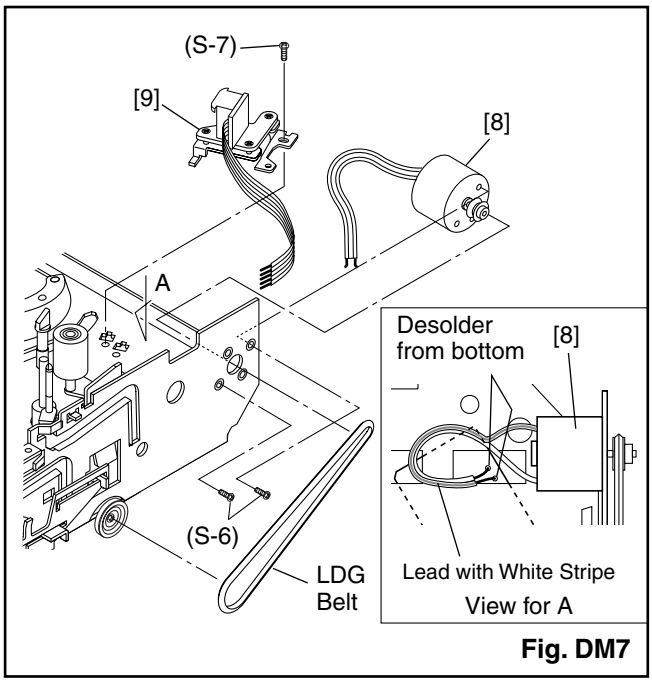


Fig. DM7

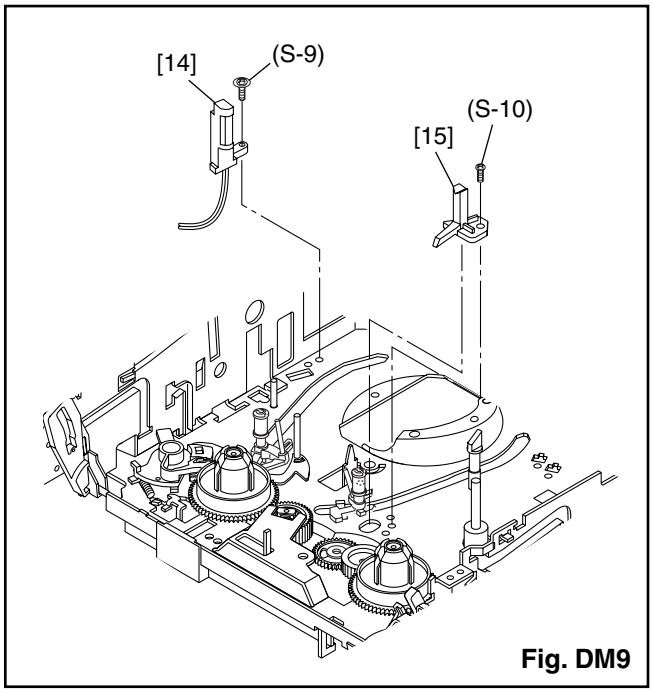
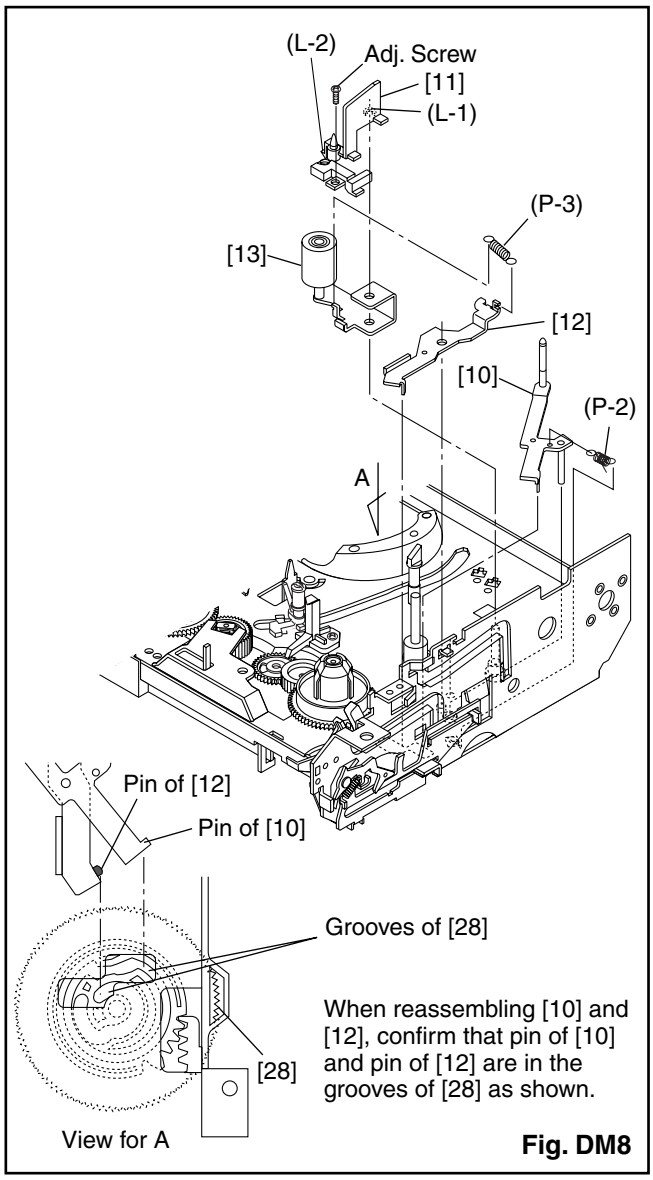


Fig. DM9



When reassembling [10] and [12], confirm that pin of [10] and pin of [12] are in the grooves of [28] as shown.

Fig. DM8

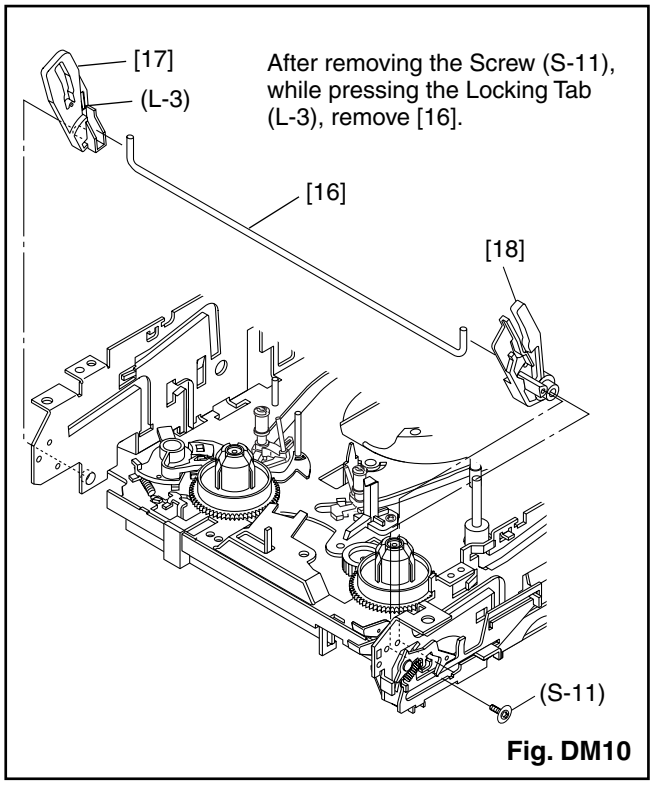


Fig. DM10

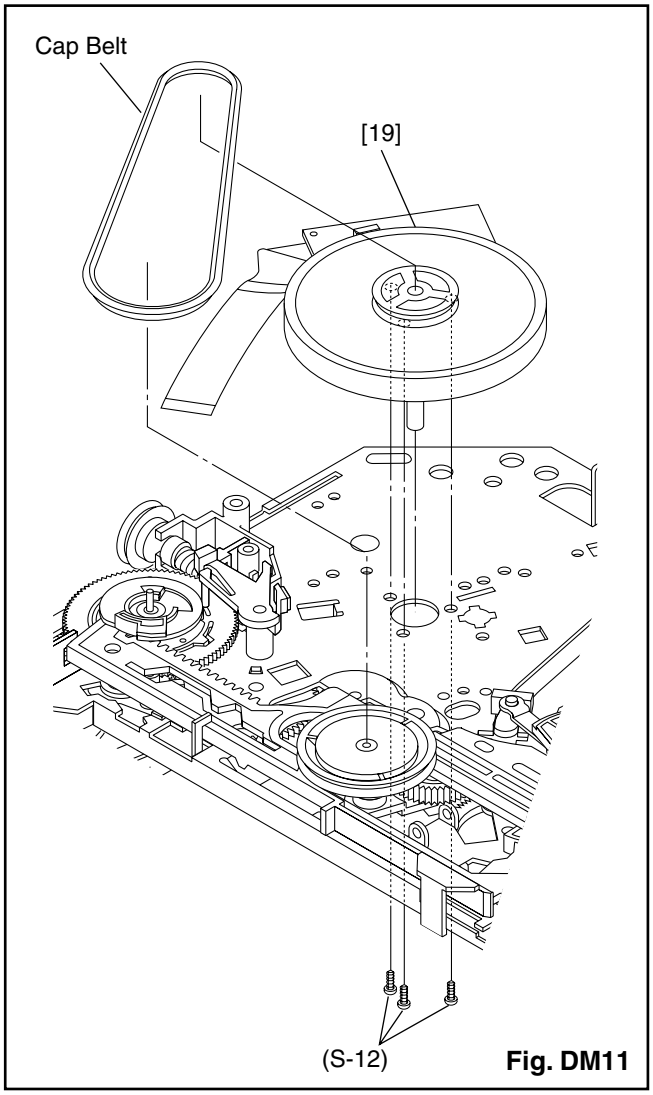


Fig. DM11

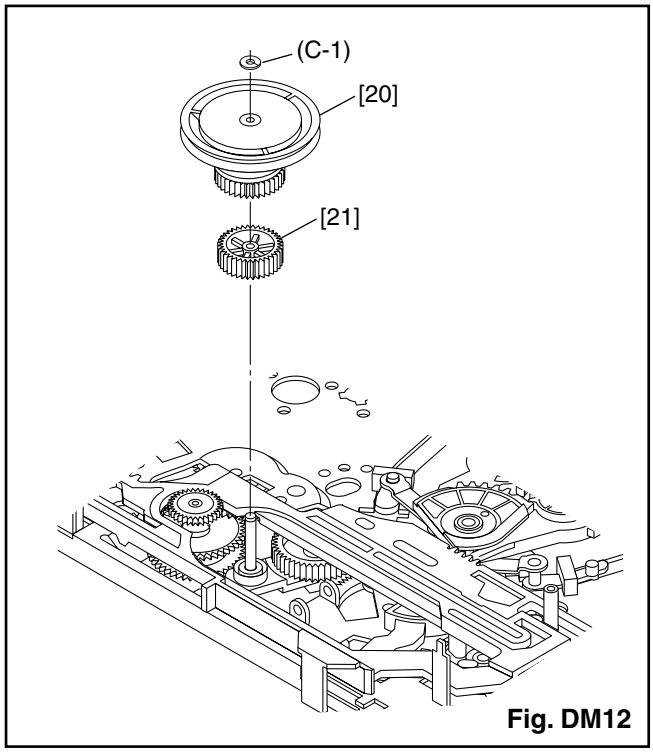
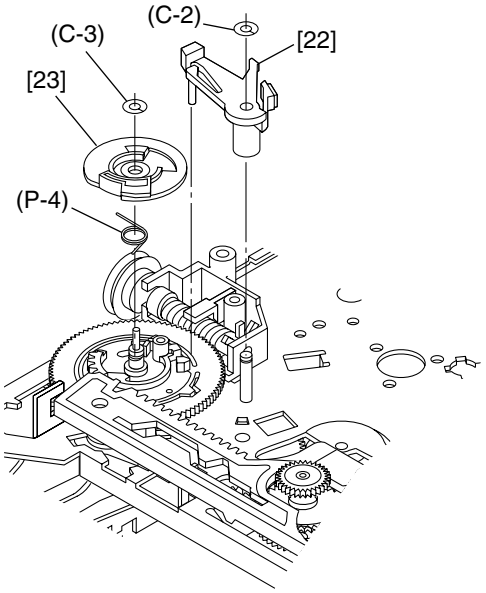
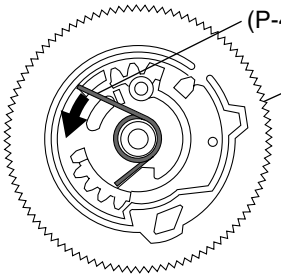


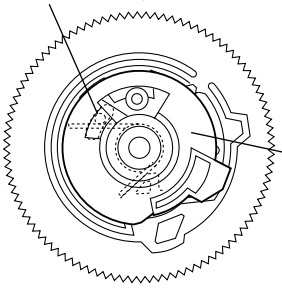
Fig. DM12



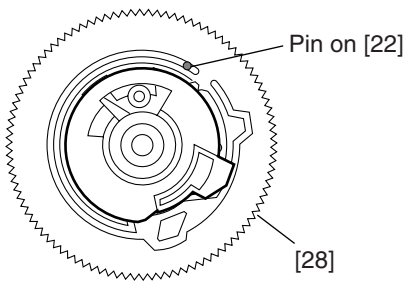


Pin on bottom of [23]

When installing [23], install the spring (P-4) to [28] as shown in the left figure, and then install [23] while pressing the spring (P-4) to the direction of the arrow in the left figure and confirming that the position of the spring (P-4) is placed as shown in the left figure.

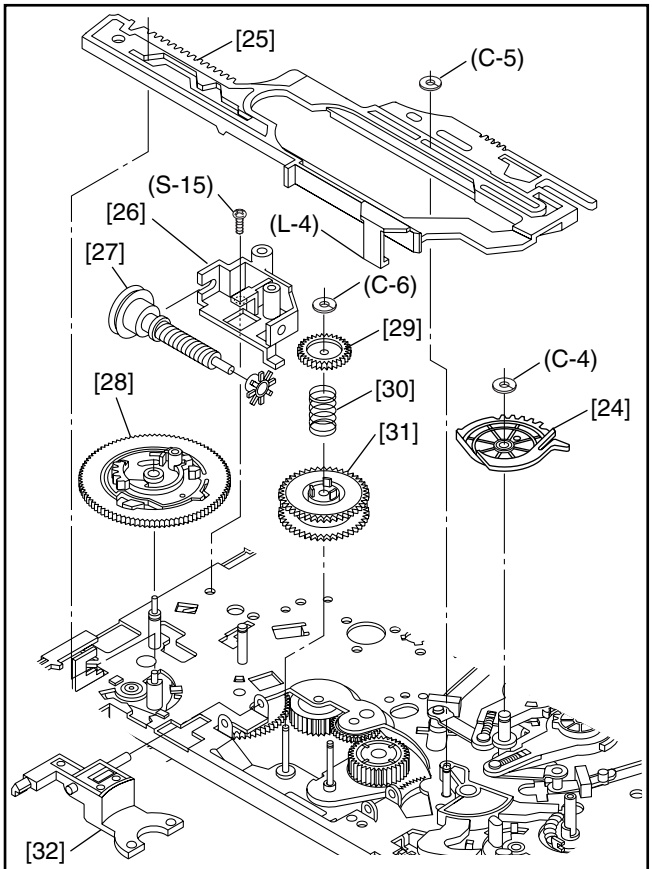


Top View

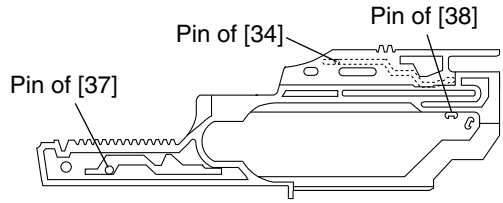


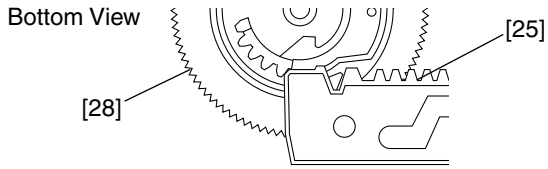
Position of pin on [22]

Fig. DM13

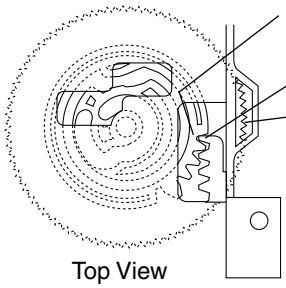


Position of Mode Lever when installed





Align [25] and [28] as shown.



When reassembling [28], meet the first groove on [28] to the first tooth on [48] as shown.

Top View

Fig. DM14

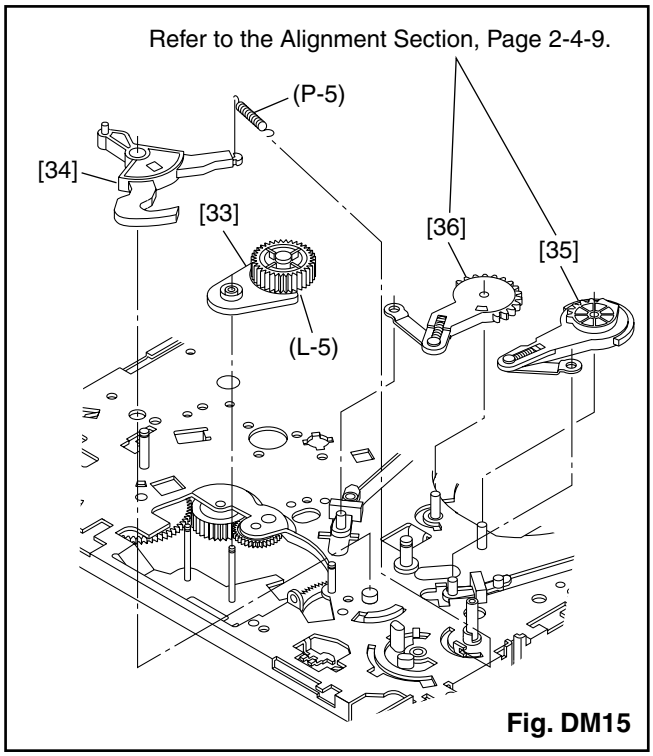


Fig. DM15

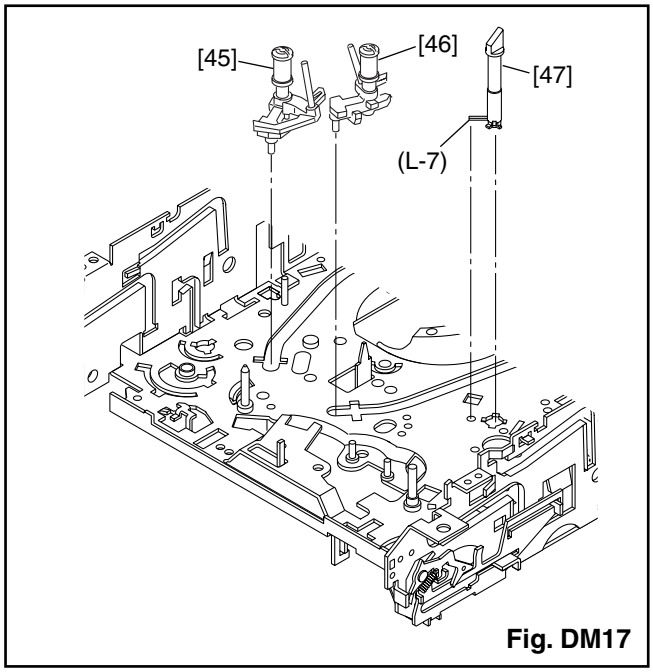


Fig. DM17

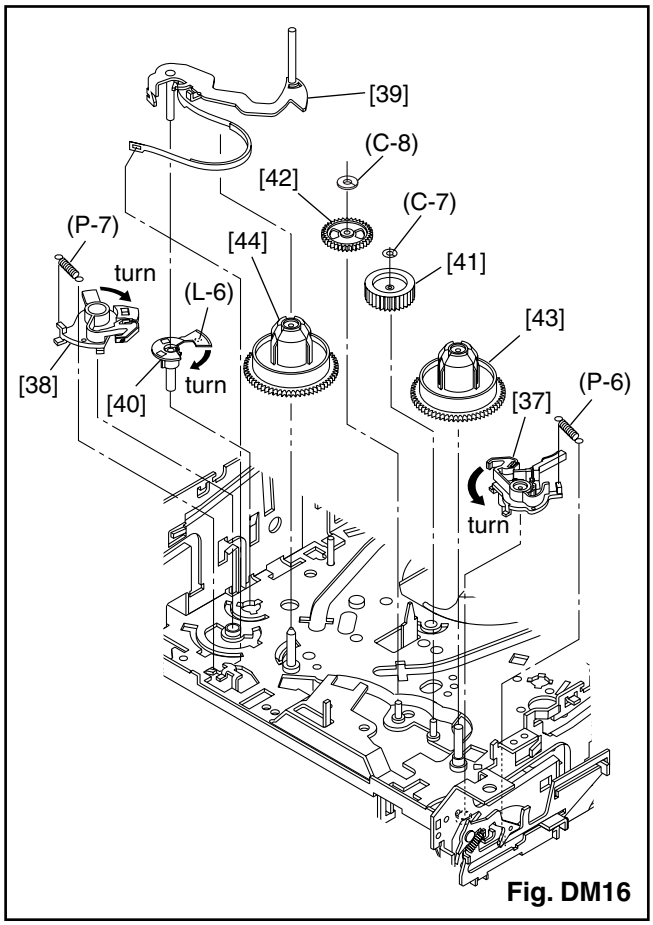


Fig. DM16

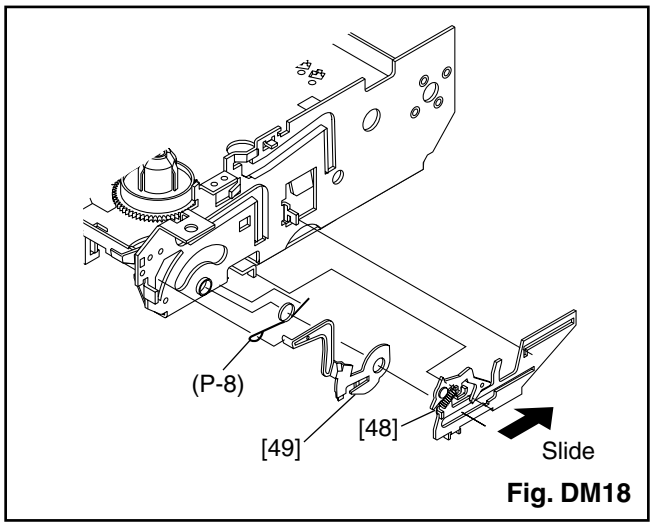


Fig. DM18

ALIGNMENT PROCEDURES OF MECHANISM

The following procedures describe how to align the individual gears and levers that make up the tape loading/unloading mechanism. Since information about the state of the mechanism is provided to the System Control Circuit only through the Mode Switch, it is essential that the correct relationship between individual gears and levers be maintained.

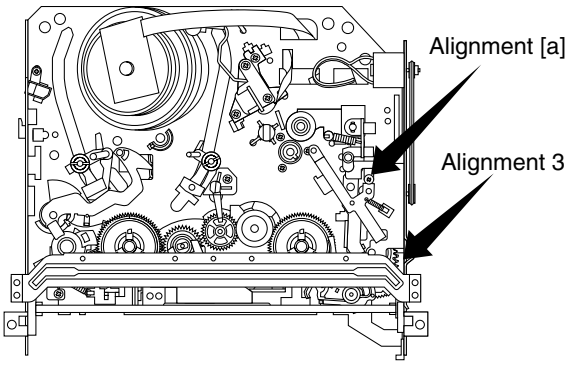
All alignments are to be performed with the mechanism in Eject mode, in the sequence given. Each procedure assumes that all previous procedures have been completed.

IMPORTANT:

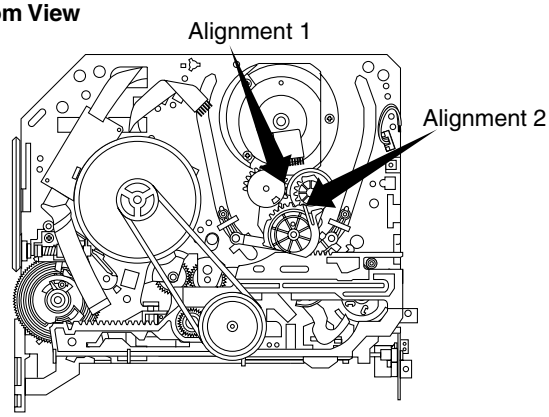
If any one of these alignments is not performed properly, even if off by only one tooth, the unit will unload or stop and it may result in damage to the mechanical or electrical parts.

Alignment points in Eject Position

Top View



Bottom View



Alignment [a] can be done independently of any other alignment.

Fig. AL1

Alignment 1

Loading Arm, S and T Assembly

Install Loading Arm S and T Assembly so that their triangle marks point to each other as shown in Fig. AL2.

Alignment 2

Mode Gear

Keeping the two triangles pointing at each other, install the Loading Arm T Assembly so that the last tooth of the gear meets the most inside teeth of the Mode Gear. See Fig. AL2.

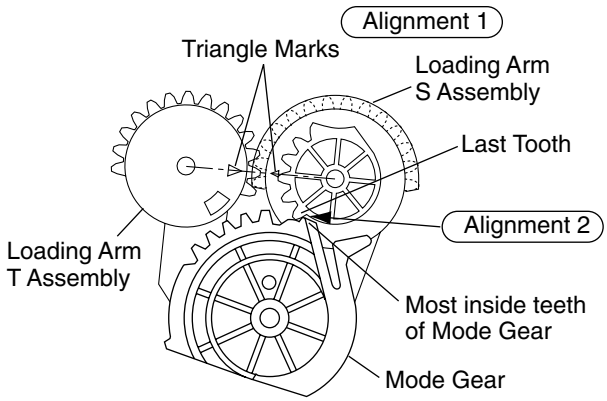


Fig. AL2

Alignment [a]

Tape Guide Assembly

Measurement of the screw must be as specified in Fig. AL3.

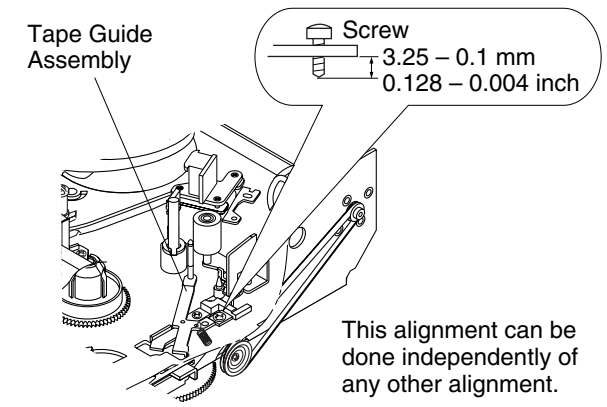


Fig. AL3

Alignment 3

Cam Gear (A), Rack Assembly

Install the Rack Assembly so that the first tooth on the gear of the Rack Assembly meets the first groove on the Cam Gear (A) as shown in Fig. AL4.

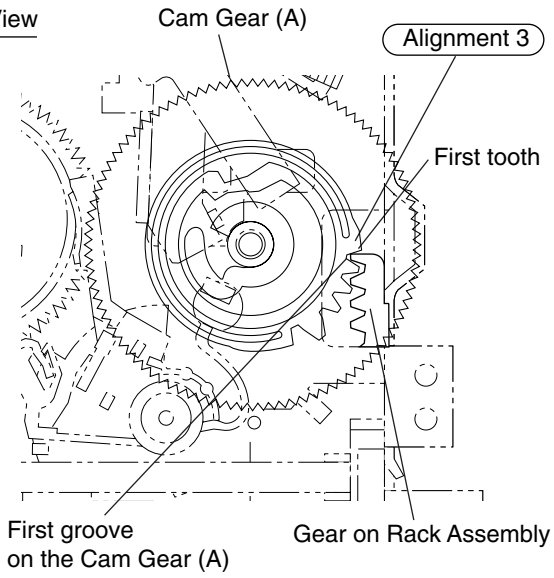
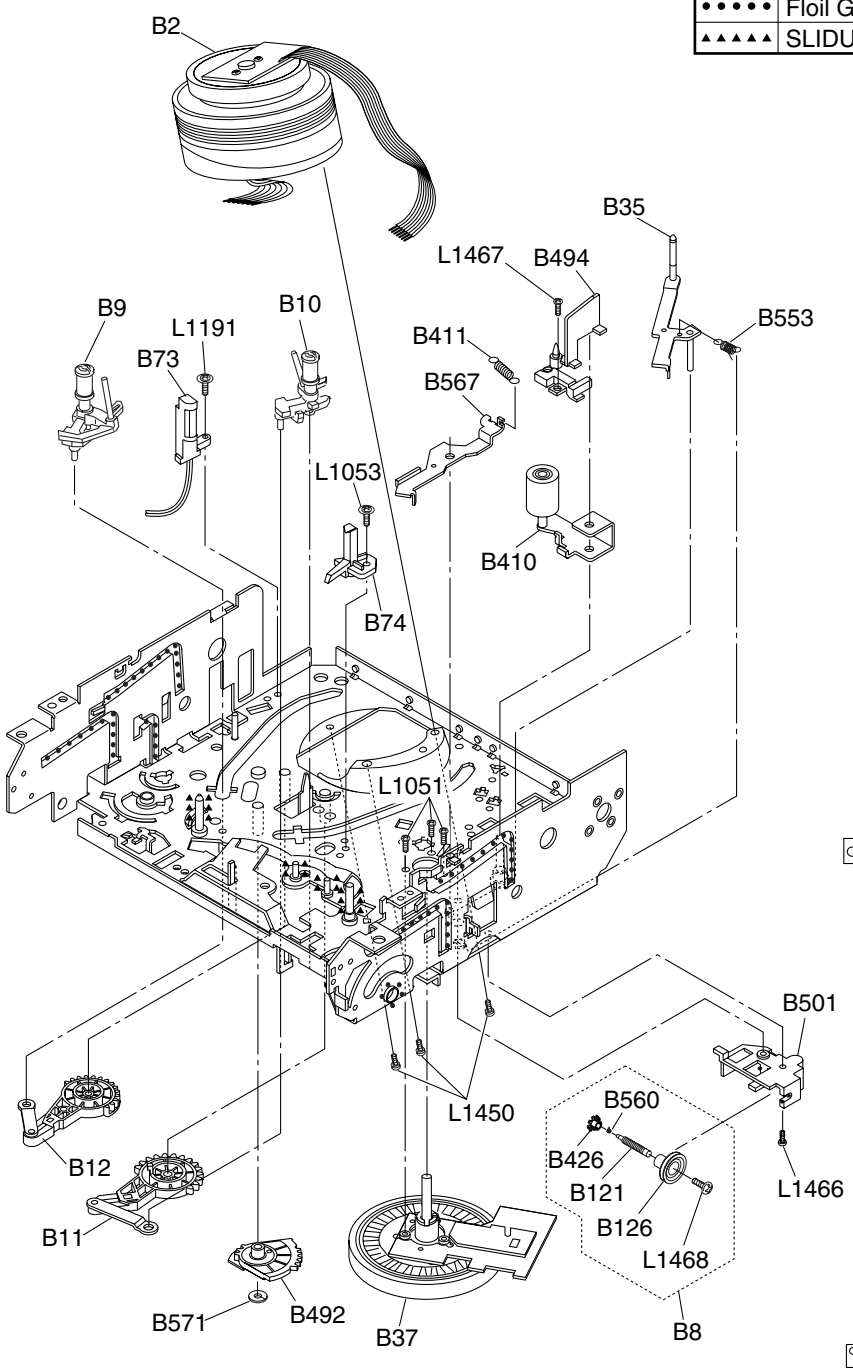


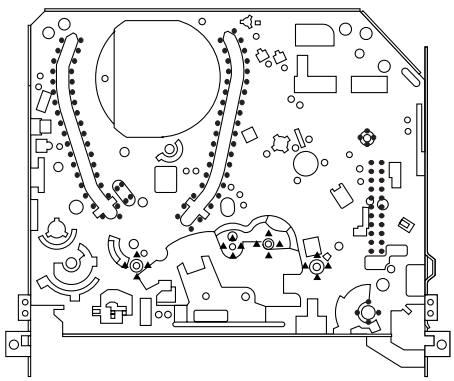
Fig. AL4

DECK EXPLODED VIEWS

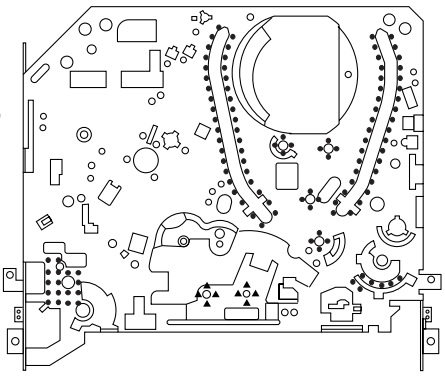
Deck Mechanism View 1

Mark	Description	Part No.
•••••	Floil G-374G (Blue grease)	0VZZ00109
▲▲▲▲▲	SLIDUS OIL #150	0VZZ00226





Chassis Assembly
Top View (Lubricating Point)

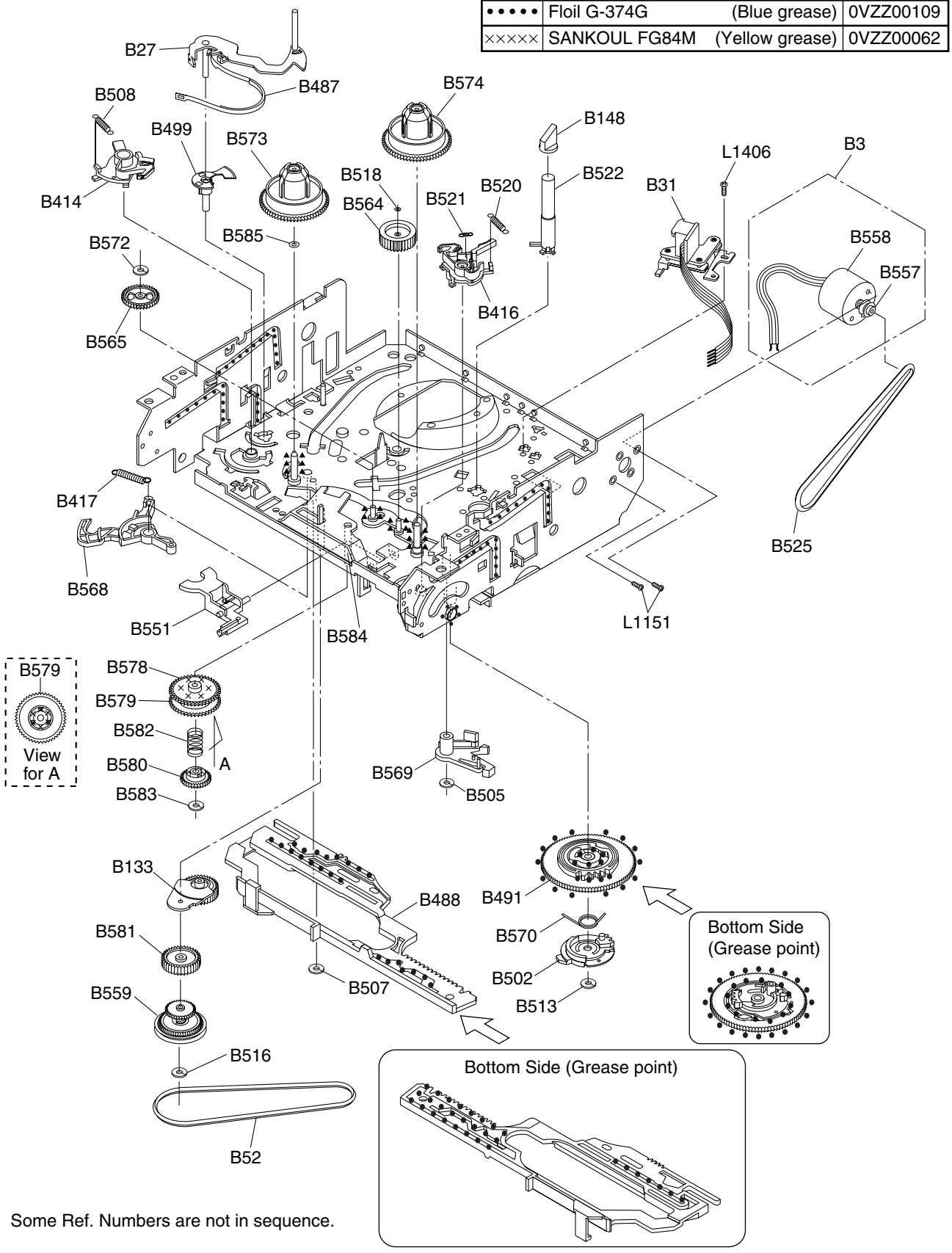


Chassis Assembly
Bottom View (Lubricating Point)

Some Ref. Numbers are not in sequence.

Deck Mechanism View 2

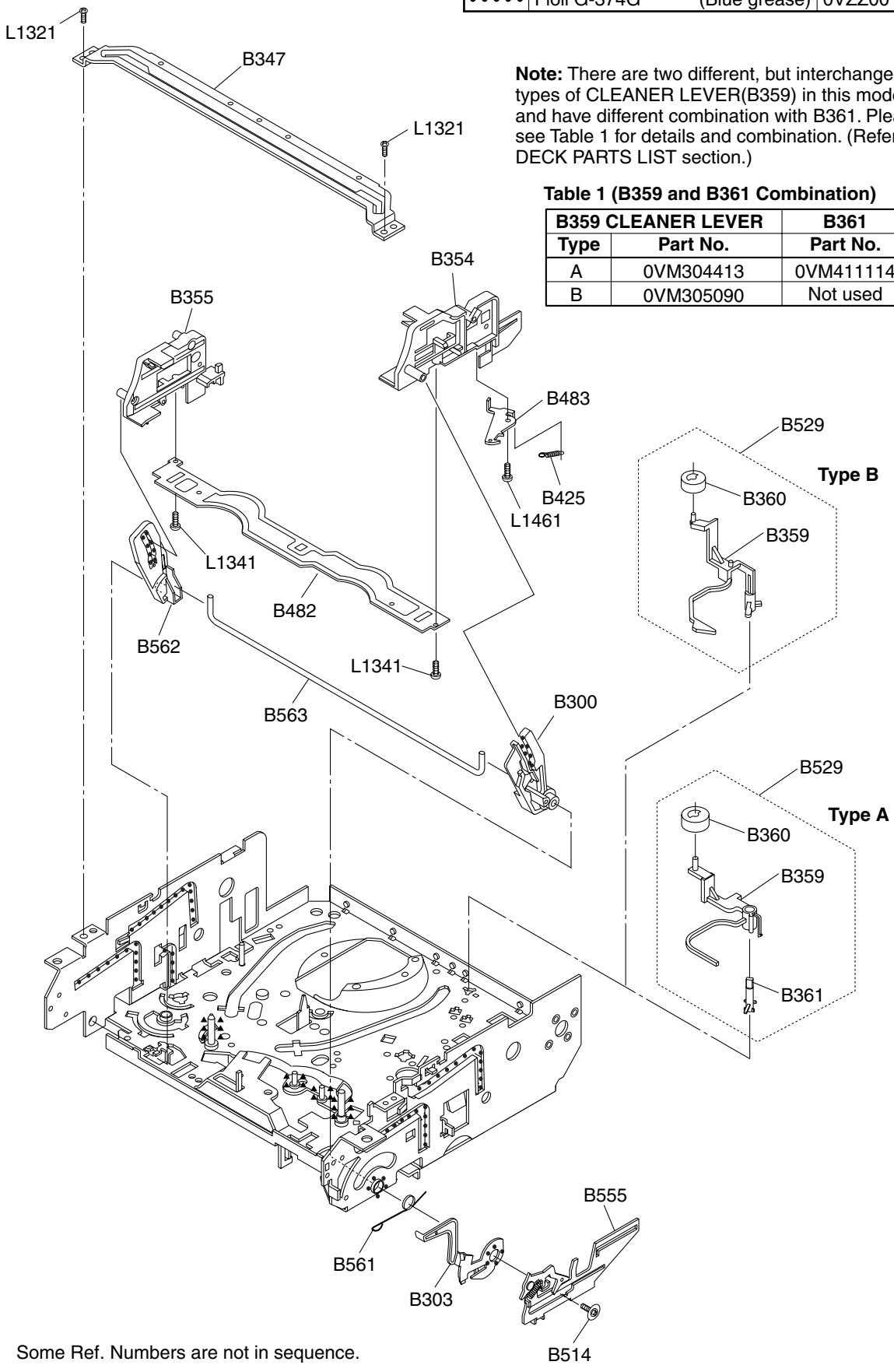
Mark	Description	Part No.
• • • • •	Floil G-374G (Blue grease)	0VZZ00109
× × × × ×	SANKOUL FG84M (Yellow grease)	0VZZ00062



Some Ref. Numbers are not in sequence.

Deck Mechanism View 3

Mark	Description	Part No.
• • • • •	Floil G-374G (Blue grease)	0VZZ00109



Note: There are two different, but interchangeable types of CLEANER LEVER(B359) in this model, and have different combination with B361. Please see Table 1 for details and combination. (Refer to DECK PARTS LIST section.)

Table 1 (B359 and B361 Combination)

B359 CLEANER LEVER		B361
Type	Part No.	Part No.
A	0VM304413	0VM411114
B	0VM305090	Not used

Some Ref. Numbers are not in sequence.

DECK PARTS LIST

Pos.	▲	12 NC	Description
B2		9965 000 12895	CYLINDER ASS. MK11 PAL 2HD 2SP
B3		9965 000 12202	LOADING MOTOR ASS. MK11
B8		9965 000 12203	PULLEY ASS. MK11
B9		9965 000 08560	MOVING GUIDE S PREP: MK10
B10		9965 000 08431	MOVING GUIDE T PREP: MK10
B11		9965 000 12204	LOADING ARM T(B) ASS. MK11
B12		9965 000 12205	LOADING ARM S(B) ASS. MK11
B27		9965 000 12206	TENSION LEVER SUB ASS. MK11
B31		9965 000 13920	AC HEAD ASS. MK11(TVCR)
B35		9965 000 12208	TAPE GUIDE ASS. MK11
B37		9965 000 13921	CAPSTAN MOTOR
B52		9965 000 08593	CAP BELT MK10
B73		9965 000 12210	FE HEAD ASS. MK11
B74		9965 000 08555	PRISM MK10
B121		9965 000 12211	WORM MK11
B126		9965 000 12212	PULLEY MK11
B133		9965 000 12213	IDLER ASS.(2) MK10
B148		4822 462 11189	TG CAP MK6
B300		9965 000 12214	C DRIVE LEVER R MK11
B303		9965 000 12215	F DOOR OPENER MK11
B347		9965 000 08445	GUIDE HOLDER A MK10
B354		9965 000 12216	SLIDER R MK11
B355		9965 000 12217	SLIDER L MK11
B359		9965 000 12416	CLEANER LEVER MK11
B360		9965 000 06561	CLEANER ROLLER MK9
B410		9965 000 12218	PINCH ARM(A) ASS. MK11
B411		9965 000 08453	PINCH SPRING MK10
B414		9965 000 12219	M BRAKE S(HI) ASS. MK11
B416		9965 000 12220	M BRAKE T(HI) ASS. MK11
B417		9965 000 12221	TENSION SPG(190265) MK11
B425		9965 000 08457	LOCK LEVER SPRING MK10
B426		9965 000 08458	KICK PULLEY MK10
B482		9965 000 12222	C PLATE MK11
B483		9965 000 08461	LOCK LEVER MK10
B487		9965 000 08462	BAND BRAKE MK10
B488		9965 000 12223	MODE LEVER(HI) MK11
B491		9965 000 12224	CAM GEAR(A) MK11
B492		9965 000 12225	MODE GEAR MK11
B494		9965 000 12226	DOOR OPENER B MK11
B499		9965 000 08467	T LEVER HOLDER MK10
B501		9965 000 12227	WORM HOLDER MK11
B502		9965 000 08469	CAM GEAR(B) MK10
B505		9965 000 12372	PSCW(625504) MK11
B507		9965 000 05342	REEL WASHER MK9 5*2.1*0.5
B508		9965 000 08470	S BRAKE SPRING MK10
B513		9965 000 08471	PSCW(752605) MK10
B514		9965 000 12228	SCREW RACK MK11

DECK PARTS LIST

Pos.	▲	12 NC	Description
B516		9965 000 05342	REEL WASHER MK9 5*2.1*0.5
B518		4822 532 13159	P.S.W CUT 1.6X4.0X0.5T
B520		9965 000 12229	T BRAKE SPRING HI(F) MK11
B521		9965 000 08482	SOFT SPRING MK10
B522		9965 000 08483	TG POST ASS. MK10
B525		9965 000 12230	LDG BELT MK11
B529		9965 000 12231	CLEANER ASS. MK11
B551		9965 000 12232	FF ARM(HI) MK10
B553		9965 000 12233	REV SPRING MK11
B555		9965 000 12234	RACK ASS. MK11
B557		9965 000 08519	MOTOR PULLEY U5
B558		9965 000 12235	LOADING MOTOR
B559		9965 000 12236	CLUTCH ASS.(HI)(2) MK11
B560		9965 000 08522	KICK SPRING MK10
B561		9965 000 08523	F DOOR SPRING MK10
B562		9965 000 08524	C DRIVE LEVER L MK10
B563		9965 000 08525	SLIDER SHAFT MK10
B564		9965 000 12237	M GEAR(HYT) N12G5F*
B565		9965 000 12238	SENSOR GEAR MK11
B567		9965 000 08544	PINCH ARM(B) MK10
B568		9965 000 08545	BT ARM MK10
B569		9965 000 12239	CAM HOLDER F MK11
B570		9965 000 12240	CAM RACK SPRING(HI) MK11
B571		4822 532 13158	P.S.W F 6*2.55*0.5
B572		4822 532 13159	P.S.W CUT 1.6X4.0X0.5T
B573		9965 000 12241	REEL S MK11
B574		9965 000 12376	REEL T MK10
B578		9965 000 12243	TR GEAR A MK10
B579		9965 000 12244	TR GEAR B MK10
B580		9965 000 12245	TR GEAR C MK11
B581		9965 000 12246	CENTER GEAR(HYT) N12G5F*
B582		9965 000 12247	TR GEAR SPRING MK10
B583		9965 000 05342	REEL WASHER MK9 5*2.1*0.5
B584		9965 000 12248	TR GEAR SHAFT MK10
B585		9965 000 12249	PSW(2957505) MK11
L1051		9965 000 05359	SCREW, B-TIGHT M2.6X6 PAN HEAD+
L1053		9965 000 05375	SCREW, S-TIGHT M2.6X8 WASHER HEAD+
L1151		9965 000 08642	SCREW, SEMS M2.6X4 PAN HEAD+
L1191		9965 000 05375	SCREW, S-TIGHT M2.6X8 WASHER HEAD+
L1321		4822 502 14009	SCREW, S-TIGHT M3X6 BIND HEAD+
L1341		4822 502 14669	SCREW, P-TIGHT M2.6X6 BIND HEAD+
L1406		9965 000 08643	AC HEAD SCREW MK9
L1407		9965 000 12250	SCREW, S-TIGHT M2.6X10 DISH HEAD+
L1450		4822 502 14671	SCREW, SEMS M2.6X5 PAN HEAD+
L1461		4822 502 30471	SCREW, P-TIGHT M2.6X6 WASHER HEAD+
L1466		9965 000 05364	SCREW, S-TIGHT M2.6X6 BIND HEAD+
L1467		9965 000 12251	SCREW, S-TIGHT M2.6X5 WASHER HEAD+
L1468		9965 000 12252	SCREW, B-TIGHT M1.7X12